

---

---

# THE BIOMED SCIENTIST



Newsletter of the Association of African Biomedical Scientists, Inc.

Web Address: <http://www.aabs-inc.org>

---

Volume 5

AUGUST 2009

---

**The Association of African Biomedical Scientists, Inc. (AABS)** is a not-for-profit organization whose membership is open to those who share the following goals: 1) Foster the development of Science in Africa; 2) Promote career development opportunities for Biomedical Scientists in North America; 3) Provide opportunities for young developing scientists; and 3) Encourage research collaboration in pursuit of advancing scientific knowledge.

**Board of Directors:**

Vincent K. Tsiagbe, Ph.D.  
Basil Ibe, Ph.D.  
Momoh, Yakubu, Ph.D.  
Mohamed A. Bayorh, Ph.D.  
Sunny E. Ohia, Ph.D.  
Robert Tackey, Ph.D.  
Benon E. Mugabe, Ph.D.  
Adebayo Oyekan, D.V.M., Ph.D.  
Thomas V. Fungwe, Ph.D.  
Sunday, O. Awe, Ph.D.  
Onikepe Adeagbo, M.D.  
Okezie I Aruoma, MBA, Ph.D., DSc, CChem, FRSC

**Executive Officers:**

**President:** Vincent K. Tsiagbe  
**Vice-President:** Basil Ibe  
**Secretary:** Adebayo Oyekan  
**Vice Secretary:** Momoh Yakubu  
**Treasurer:** Thomas V. Fungwe

**EDITOR'S CORNER**

Welcome to another issue of The BioMed Scientist, our official newsletter. I hope that you enjoy reading it. Please send your comments, suggestions or criticisms to the editor. We invite articles that are in the spirit of our goals for the next issue. Brief discussions and articles of scientific nature are welcome.

Let us utilize this forum to network and to establish relationships that enable us help one another succeed in our professional endeavors.

**Editor:** Momoh Yakubu, Ph.D.  
[yakubu\\_ma@tsu.edu](mailto:yakubu_ma@tsu.edu)

**Editorial Board:**

Momoh Yakubu, Ph.D.  
Adebayo Oyekan, Ph.D.  
Vincent K. Tsiagbe, Ph.D.  
Sunny Ohia, Ph.D.

## MESSAGE FROM THE PRESIDENT

*Vincent K. Tsiagbe, Ph.D.*

Fellow members of AABS: As we launch the fifth volume of the *Biomed Scientist*, it gives me great pleasure to reflect on our achievements, no matter how modest.

During EB2008, AABS held a general meeting at which a new Board of Trustees was elected. The Board also met to elect new Executive Officers and Editorial Board of the *Biomed Scientist*. The elected officials are indicated on page one of this newsletter. The AABS did not host any annual meeting in the past year, mainly due to the fact that the Federation of American Societies for Experimental Biology (FASEB) did not hold a general meeting at which all the Experimental Biology (EB) society members participated. An attempt to hold a satellite meeting at EB 2009 (hosted by APS, ASBMB, ASPET, ASIP, ASN, and AAA) in New Orleans, LA, did not materialize due to insufficient representation of AABS membership.

There is no gainsaying the fact the downturn in the global economy has dealt a devastating blow to our fundraising activities as well as to our dues collections. The concomitant effect on research grant funding has had negative impact on the enthusiasm of members to pay their dues and contribute articles to our newsletter. Considering that the financial analysts are now pointing to indicators of financial rebound, members of AABS should now also begin to reenergize themselves and get back to the important goals that we have set for ourselves. It is important to laud every small step we make in the positive direction.

Our association should also derive some hope from the dramatic turn of events on the global political arena (championed by the election of Barack H. Obama as the first black president of the United States of America), whereby biomedical science is now coming back to the forefront, where it actually belongs. For us to partake of the few opportunities that are beginning to open up, it is imperative that members of AABS take a vigilant stance in seeking out and making available information that others can take advantage of. To this end, I would like us to make use of all the communication channels available to us in disseminating useful information to members. Communications can be forwarded for distribution on our list server, and/or posted on our web site.

Even though our membership is steadily rising some members miss out on list server communications when they relocate, because they have not updated the Secretariat with their current address and e-mail. Let us endeavor to keep our profiles current in order to stay involved. Members are encouraged to alert the Secretariat of relocations of colleagues who might have genuinely forgotten to update their profiles.

Dues payment has continued to be of concern, detracting us from facing squarely the great ideas we have espoused to make AABS impactful. There is no doubt that we cannot depend on dues payments alone, in order to attain our goals. However, the current financial climate has dried up charitable donations to a great extent. Thus, while we wait for the "green light" of the economic upturn, we have to do our very best to shoulder some of the load ourselves.

The Board of Trustees of AABS continues to be committed to our aspirations to reach out to the continent of Africa, as participants in the changes in the scientific climate that is beginning to shape up.

One area of concern is the inadequate patronage of our newsletter. There is power in access to useful information! We should, therefore, utilize the *Biomed Scientist* (the official newsletter of AABS), to get our voices heard on issues pertinent to our progress. The forum is open to members to advertise jobs (available or being sought), as well as for brief scientific reports, announcements, and for light comedy (in good taste). Members from Africa are especially encouraged to submit articles.

Considering that FASEB is not scheduled to hold a big meeting of Experimental Societies in the near future, we should plan to hold as many satellite meetings as we can, in order to keep the "torch burning". In this respect, AABS plans to hold a meeting at the next larger EB meeting to be held April 9-12, 2011, in Washington, DC. Member societies represented are APS, ASBMS, ASPET, ASIP, ASN, and AAA. Let us endeavor to attend this meeting.

On behalf of the Board of Trustees of AABS, I wish you an enjoyable reading. I also encourage you to regularly visit our web site: <http://www.aabs-inc.org>.

To be a part of the communication, you can request to be added to AABS list server, by sending e-mail to [tsiagbv@umdj.edu](mailto:tsiagbv@umdj.edu).

Long Live AABS!  
KEEP UP THE SPIRIT!  
Vincent K. Tsiagbe  
President, AABS, Inc

*Dr. Vincent K. Tsiagbe is an Associate Professor at Department of Oral Biology and Department of Pathology, at University of Medicine and Dentistry of New Jersey. He is a Board Member and Executive President of AABS, Inc.*

## MEMBERSHIP DRIVE

AABS members are encouraged to spread the news of AABS to fellow Biomedical Scientists who are not yet registered members and encourage them to visit our web site, <http://www.aabs-inc.org>, in order to apply for their membership.

For those who haven't done so, please send your annual dues to the Treasurer at the following address:

Dr. Thomas V. Fungwe  
US Department of Agriculture  
Center for Nutrition Policy and Promotion  
3101 Park Center Dr.  
Alexandria, VA 22302-1594  
United States of America

The membership dues for the current year are:

Faculty / Scientist:	US\$50.00
Postdoctoral fellow:	US\$30.00
Graduate Student:	US\$10.00

### *Dues for members from Africa*

Faculty / Scientist:	US\$30.00
Postdoctoral fellow:	US\$10.00
Graduate Student:	US\$10.00

Donations to our cause are always welcome. Remember that your dues and donations are tax-deductible.

## FEATURED ARTICLES

### Impact Factors

*Submitted by Adebayo O. Oyekan DVM, PhD.*

Journal Impact Factor is from Journal Citation Report (JCR), a product of Thomson ISI (Institute for Scientific Information). JCR provides a number of quantitative tools for evaluating journals. One of these is the impact factor, a measure of the citations to science and social science journals. The impact factor measures the frequency with which the "average article" in a journal has been cited in a given period of time, usually a three-year period. Though the impact factor is a more frequent proxy and apply only to journals, not individual articles or individual scientists, some related values are also used. These include (i) the immediacy index i.e. the ratio of the number of citations for an article in a journal in a given year to the number of articles published (ii) the cited half-life i.e. the median age of the articles that were cited in JCR each year and (iii) the aggregate impact factor for a subject category which is

calculated taking into account the number of citations to all journals in a particular subject category and the number of articles from all the journals in the subject category. The relative number of citations an individual article receives is better viewed as citation impact.

The Hirsch index (h-index) is another measure of productivity/impact which applies to individual articles or individual scientists. The h-index quantifies both the actual scientific productivity and the apparent scientific impact of a scientist, a group of scientists, such as a department or university or country. The index is based on the set of most cited papers and the number of citations received in the publications of other scientists. The h-index or number was suggested as a possible useful guideline for tenure decisions at major research universities, for membership or fellowship in certain scientific professional societies.

The impact factor of a journal is calculated based on a two- or three-year period. It can be viewed as the average number of citations in a year given to those papers in a journal that were published during the two preceding years. For example, the 2008 impact factor of a journal would be calculated as follows:

A = the number of times articles published in 2006-7 were cited in indexed journals during 2008

B = the number of "citable items" (usually articles, reviews, proceedings or notes; not editorials and letters-to-the-Editor) published in 2006-7

2008 impact factor = A/B

(note that the 2008 impact factor will be published in 2009, because it could not be calculated until all of the 2008 publications had been received.)

Using this expression, a simple rule-of-thumb to use to conveniently assess the impact factor of a journal is that a journal that is cited once, on average, for each article published has an impact factor of 1. It is to be remembered that not all articles are considered "citable" by all databases thus excluding certain types of articles such as news items, correspondence, and errata from the denominator.

The question arises: how is the impact factor of a new journal calculated? Such journals that are indexed from their first published issue will receive an Impact Factor after the completion of two years' indexing; in this case, the citations to the year prior to Volume 1, and the number of articles published in the year prior to Volume 1 are known zero values. Journals that are indexed starting with a volume other than the first volume will not have an Impact Factor published until three complete data-years are known; annuals and other irregular publications will sometimes publish no items in a particular year, affecting the count. The impact factor is for a specific time period; it is possible to calculate the impact factor for any desired period, for which the web site gives instructions.

Though the impact factor was originally intended as an objective measure of the reputability of a journal (Garfield), it is now being increasingly applied to measure the productivity of scientists. The way it is customarily used is to examine the impact factors of the journals in which the scientist's articles have been published. This has obvious appeal for an academic administrator who knows neither the subject nor the journals.

Despite its general acceptance as a measure of productivity, a number of issues regarding impact factor have spurred debate especially regarding its degree of objectivity. While the number of publications and citation statistics are two unassailable measures of objectivity, the use of such measures in general and the impact factor in particular is still a matter of debate. There are those who question the validity of the impact factor, how easily manipulated it is and its misuse. For example, journals sometimes raise their impact factors artificially by publishing a larger percentage of review articles since many research articles remain uncited after 3 years while nearly all review articles receive at least one citation within three years of publication. Another way of manipulating impact factor of a journal involves the editor of a journal encouraging authors to cite articles from that journal in articles submitted for publication just as citation of articles in the same journal. Yet another example of manipulation involves academic reviewers involved in programmatic evaluations, particularly those for doctoral degree granting institutions. These individuals often turn to ISI's proprietary impact factor listing of journals in determining scholarly output leading to a bias which automatically undervalues some types of research and distorts the total contribution each faculty member makes.

Failure to include more international journals or other types of publications is another consideration. Although Web of Knowledge indexes journals from 60 countries, the coverage is very uneven. Very few publications from languages other than English are included, and very few journals from the less-developed countries. Even the ones that are included are undercounted, because most of the citations to such journals will come from other journals in the same language or from the same country, most of which are not included. Many high quality journals in the applied aspects of some subjects are not included, such as marketing communications, public relations and promotion management and many important but not peer-reviewed technical magazines. Book publications are not indexed, including textbooks, handbooks and reference books. Conference proceedings publications are not indexed, including conferences, workshops and symposia. In addition, the absolute number of researchers, the average number of authors on each paper, and the nature of results in different research areas, as well as variations in citation habits between different disciplines, particularly the number of citations in each paper, all combine to make impact factors between different groups of scientists

incommensurable. Generally, for example, medical journals have higher impact factors than mathematical journals and engineering journals. This limitation is accepted by the publishers; it has never been claimed that they are useful between fields--such a use is an indication of misunderstanding.

This therefore calls for an objective measure of impact of a journal or productivity of an investigator. The number of publications and citation statistics are two obvious candidates for such an objective measure. However, the use of such measures in general is also a matter of debate just as the impact factor as a metric.

In conclusion, it appears that the number of citations to papers in a particular journal does not really directly measure the true quality of a journal, much less the scientific merit of the papers within it. It also reflects, at least in part, the intensity of publication or citation in that area, and the current popularity of that particular topic, along with the availability of particular journals. Journals with low circulation, regardless of the scientific merit of their contents, will never obtain high impact factors in an absolute sense, but if all the journals in a specific subject are of low circulation, as in some areas of botany and zoology, the relative standing is meaningful. Since defining the quality of an academic publication is problematic, involving non-quantifiable factors, such as the influence on the next generation of scientists, assigning this value a specific numeric measure cannot tell the whole story. Therefore, by merely counting the frequency of citations per article and disregarding the prestige of the citing journals, the impact factor becomes merely a metric of popularity, not of prestige. While useful, impact factors cannot correctly be the only thing to be considered by libraries in selecting journals. The local usefulness of the journal is at least equally important, as is whether or not an institution's faculty member is editor of the journal or on its editorial review board.

*Dr. Adebayo O. Oyekan is a Professor and Director of the Center for Cardiovascular Diseases, Texas Southern University College of Pharmacy and Health Sciences, Houston, TX. He is also the Executive Secretary, AABS Inc.*

## **Sons or Daughters- Determined By Your Siblings**

*Study recounted by Momoh A. Yakubu, PhD*

This is the outcome of a research reported by the Newcastle University. In a research published online in the journal *Evolutionary Biology* by Dr. Gellatly involving thousands of families is helping prospective parents work out whether they are likely to have daughters or sons. This study has shown that men inherit the tendency to have male or female

children from their parents. According to the author, a man with many brothers is more likely to have sons than the one with more sisters and the reverse is true. The research involved a study of 927 family trees containing information on 556,387 people from North America and Europe going back to 1600. "The family tree study showed that the likelihood of one having a boy or a girl is inherited from the parents, with men more likely to have sons if they have more brothers but are more likely to have daughters if they have more sisters. However, the author could not predict in the case of women.

Genetically, men carry the XY chromosomes in their sperm and women carry the XX chromosome and hence biologically, men determine the sex of a baby depending on whether their sperm is carrying an X or Y chromosome. If the an X chromosome from the father combines with the mother's X chromosome the outcome will be a baby girl (XX) and if a Y chromosome from the father combines with the mother's X chromosome the outcome will be a boy (XY). The Newcastle University study suggests that an as-yet undiscovered gene controls whether a man's sperm contains more X or more Y chromosomes, which affects the sex of his children. On a larger scale, the number of men with more X sperm compared to the number of men with more Y sperm affects the sex ratio of children born each year.

Sons or daughters? A gene consists of two parts, known as alleles, one inherited from each parent. In his paper, Mr. Gellatly demonstrates that it is likely men carry two different types of allele, which results in three possible combinations in a gene that controls the ratio of X and Y sperm;

- Men with the first combination, known as mm, produce more Y sperm and have more sons.
- The second, known as mf, produce a roughly equal number of X and Y sperm and have an approximately equal number of sons and daughters.
- The third, known as ff produces more X sperm and has more daughters.

"The gene that is passed on from both parents, which causes some men to have more sons and some to have more daughters, may explain why we see the number of men and women roughly balanced in a population. If there are too many males in the population, for example, females will more easily find a mate, so men who have more daughters will pass on more of their genes, causing more females to be born in later generations," says Newcastle University researcher Mr. Gellatly.

More boys born after the wars: In many of the countries that fought in the World Wars, there was a sudden increase in the number of boys born afterwards. The year after World War I ended, an extra two boys were born for every 100 girls in the UK, compared to the year before the war started. The gene, which Mr. Gellatly has described in his research,

could explain why this happened. As the odds were in favor of men with more sons seeing a son return from the war, those sons were more likely to father boys themselves because they inherited that tendency from their fathers. In contrast, men with more daughters may have lost their only sons in the war and those sons would have been more likely to father girls. This would explain why the men that survived the war were more likely to have male children, which resulted in the boy-baby boom.

In most countries, for as long as records have been kept, more boys than girls have been born. In the UK and US, for example, there are currently about 105 males born for every 100 females. It is well-documented that more males die in childhood and before they are old enough to have children. So in the same way that the gene may cause more boys to be born after wars, it may also cause more boys to be born each year.

How does the gene work? In a simplified example, in which men either have only sons, only daughters, or equal numbers of each, though in reality it is less clear cut. It shows that although the gene has no effect in females, they also carry the gene and pass it to their children.

In a first family tree (A) the grandfather is mm, so all his children are male. He only passes on the m allele, so his children are more likely to have the mm combination of alleles themselves. As a result, those sons may also have only sons. The grandsons have the mf combination of alleles, because they inherited an m from their father and an f from their mother. As a result, they have an equal number of sons and daughters (the great grandchildren). In a second tree (B) the grandfather is ff, so all his children are female; they have the ff combination of alleles because their father and mother were both ff. One of the female children has her own children with a male who has the mm combination of alleles. That male determines the sex of the children, so the grandchildren are all male. The grandsons have the mf combination of alleles, because they inherited an m from their father and f from their mother. As a result, they have an equal number of sons and daughters (the great-grandchildren).

*Dr. Momoh A. Yakubu is a Senior Scientist/Associate Professor at the Texas Southern University Center for Cardiovascular Diseases, College of Pharmacy and Health Sciences, Houston TX. He is also the Executive Vice Secretary of AABS and Editor of the Biomed Scientist.*

## Teaching versus research dilemma in academia: A literature review

Mohamed L. Salem<sup>1,2</sup>, Faris Q. Alenzi<sup>3</sup>, Iman M. El-Nashar<sup>3</sup>, Iman El-Tounsi<sup>3</sup>, & Richard N Wyse<sup>4</sup>.

**Abstract:** This review evaluates the various aspects of the academic career with respect to how and why components of entering academic career. The expectations, the short- and long-term benefits, the move from main stream research to commercialization, and other key issues for academics and aspiring academics to consider are covered in this review. Basically, academics are expected to devote their time to perform three tasks: teaching, research, and community service, where teaching and research are the main tasks. Whereas, some 'not research-intensive' institutions consider teaching effectiveness as the main job, others i.e. 'research-intensive' institutions evaluate the tenure and/or promotion of faculty on their research productivity. The balance in the teaching/research/service relationship is an eternal dilemma that faces faculty in higher institutions and controls the career progression of such individuals. This dilemma is likely to disturb the faculty, in particular junior ones in their journey to the pinnacle of their career. It is important, therefore, to match the academic interests and capabilities of faculty with departmental/institutional programs and goals with a view to achieving optimal performance for faculty. Thus, academic institutions should create policies that ensure equitable integration of teaching, research, and service for faculty as a means to facilitate career progression metrics for faculty to achieve desirable teaching effectiveness and research productivity.

**Key words:** Professors, Career, Research, Teaching, Higher Education, Academics

<sup>1</sup>Department of Surgery, Medical University of South Carolina, Charleston, SC, USA; <sup>2</sup>Department of Zoology, Faculty of Science, Tanta University, Egypt; <sup>3</sup>Department of Medical Laboratories, College of Applied Medical Sciences, King Faisal University, PO Box 2114 Dammam, Saudi Arabia, <sup>4</sup>Imperial College, London, UK.

Address Correspondence to: Dr. Mohamed Labib Salem, Department of Surgery and Hollings Cancer Center, Medical University of South Carolina, 86 Jonathan Lucas street, Charleston, SC 29425, Tel: +1-843-792-7576; Fax: +1-843-792-2556; e-mail: salemm@musc.edu, mohamedlabibsalem@yahoo.com

## INTRODUCTION

Why do people enter academic life? Is it freedom to pursue a subject that fascinates them? Is it the intellectual challenge? Is it the thought that it is a career with clear focus

and one that will last a lifetime? Is it the perceived autonomy? Whatever the reason, the importance of blending one's interests and capabilities with those of the department and institution quickly becomes apparent, as does the need for effective communication with colleagues within and outside the institution. Unlike a position in the industry, an academic appointment often runs for a lifetime. It is important, therefore, to match one's interests and capabilities with those of the department and institution to which one belongs or is considering. Depending on research status of an institution, teaching is central to the activities of academics at higher institutions; however, many academics see themselves basically as researchers<sup>1-3</sup>. Thus, being a good teacher requires translation of the ongoing research to contemporary information being taught to students. Thus, research is essential to teaching, since what one teaches is the subject that makes the past speak to the present with a positive voice<sup>4,5</sup>. Hence, faculty cannot be good teachers if they are not good scholars.

College professors organize and conduct the functions of higher education. They engage in a variety of activities, from delivering lectures to conducting research and writing textbooks. With the exception of scheduled classes which can consume as few as three hours a week in graduate universities or up to twelve to sixteen hours per week for undergraduates, a professor's time is largely spent on research, preparing class material, meeting with students, or however else he/she chooses. This profession is thus best suited for motivated self-starters, and its highest rewards are given to those who can identify and explore original problems in their fields. Tenured professors have relatively high job security and professional freedom. Once tenured, a professor can largely set his or her own responsibilities and decide, to a large extent, how to divide his time between teaching, writing, researching, and administration. However, tenure no longer means complete immunity as a post-tenure review is now mandated at most universities and those who fall behind on teaching and independent scholarship may no longer be as secure as in the past. The most difficult years of being a professor are the early ones when there is great pressure to publish a significant body of work to establish the credentials that lead to tenure. However, the work of junior and senior faculty is quite similar and the profession offers intellectual stimulation and freedom to all its members. Some medical schools are genuinely beginning to address the oversupply of PhDs with a great variability throughout the world.

## Teaching-research dilemma

Research versus teaching is the undergraduate instructor's eternal dilemma such that juggling these two activities is a delicate balancing act for most college faculty<sup>4-11</sup>. Theoretically, there should be integration between doing original research and transferring the knowledge gained to others, typically students, through teaching<sup>8,9</sup>. Practically, however, this concept is still so far controversial in

academia<sup>8</sup>. Quality academic research requires the writing of proposals for funding, supervising graduate students, planning and carrying out the research, attending and presenting at conferences, and writing papers. Quality academic teaching requires planning and updating lessons, curriculum development, creating appropriate challenging but fair assignments, writing and marking examinations, and dealing with student's personal and academic problems.

For a university to be recognized as "world class" by virtue of the quality of its teaching, academics at these institutions need to be successfully expanding the frontiers of human knowledge through performance of cutting-edge research<sup>5</sup>. Given that federal governments in many nations count on universities to be leaders in innovation in different fields of research area<sup>12</sup>, and that scholarly community calls on faculty to stay committed to knowledge for its own interest<sup>8,9</sup>, the major challenge is how faculty create a balance between teaching and research<sup>13</sup>. In addition, tenure and promotion are usually based on research and publication record rather than teaching<sup>13</sup>. Success in one aspect, teaching or research, should not bypass or neglect the other aspect<sup>8,9,14,15</sup>. In the perfect world, both aspects of activity should complement the other in order to support faculty in performing these dual functions as they infuse knowledge to those who would apply it in their professions<sup>14,16</sup>.

Any institution should invest a great deal of time and resources for achieving effective teaching and research for its faculty. After initial hiring, the institution typically invests further money and resources over the next several years into these positions until these individuals are able to attract their own independent research funding. Academics that move from institutions midway through their careers must therefore negotiate before accepting the post, preferential terms for their agreed level of internal financial support for research and staffing since there is typically no opportunity to do so once they have started in their new post. Generally speaking, faculty members can be classified into four groups: 1) those who are excellent at both research and teaching (rare); 2) dedicated researchers (no real interest in teaching merely meeting their teaching commitments); 3) dedicated teachers (little interest in research, some are active in educational scholarship, writing texts and instructional software, developing new instructional methods, attending education-related conferences and publishing in educational journals); and 4) the compromising majority (most faculty members value and enjoy both research and teaching, but time or internal department constraints force them to put their emphasis on one or the other).

Given that teaching is considered as an essential job of academics, it is critical that when a faculty is interviewing for an academic position, applicants typically should not hesitate to discuss how they would approach their teaching. Departments may request applicants to submit a statement

of their teaching philosophy, which thus demands prior preparation in order to articulate one's teaching philosophy, as how one conceptualizes the learning process and how one then proposes to facilitate this process in the classroom. That said, nevertheless, the majority of universities in the world evaluate their faculty based on their research performance - this is disadvantageous to the 'natural' teachers. Given the relatively low ranking of teaching in both departmental incentives and reward structures at most universities, most academics feel constrained to focus more on research, even if it does not represent their natural strength. The result is often a variable level of inadequate teaching much of it delivered by academics that could actually do much better and would like to if they had the time to devote to improving their teaching skills. It is rare that an academic might be turned down for a position because they have done less teaching. Conversely, less research would get them turned down every time.

### **The decision to pursue an academic career**

Earning a PhD is a huge endeavor and a PhD is the highest academic degree granted by North American universities and many other countries. It requires exceptional capability and a major commitment of time and resources. Whilst it opens doors to certain occupations, it also closes the doors to others by making one appear unsuited or overqualified. Ph.D. programs are designed to prepare students to become scholars, that is, to discover, integrate, and apply knowledge, as well as to communicate and disseminate it. A doctoral program is an apprenticeship that consists of lectures or laboratory courses, seminars, examinations, discussions, independent study, research, and, in many instances, teaching. One or two years of study normally represent a probationary period during which a preliminary or qualifying examination is required. The probationary period is followed by an examination for admission to full candidacy when students devote essentially full-time to completing dissertation research. This research, planned with the major advisor and the dissertation committee, usually takes 1-3 years, depending on the field. An oral defense of the research and dissertation before a graduate committee constitutes the final examination.

There are certainly many other things one can do with a Ph.D. besides becoming an academic. With very few exceptions, one can no longer become a professor in a four-year college or university without a Ph.D. or its equivalent. In all science fields, and in some engineering fields, once awarded a Ph.D., there is often a prior requirement of a period of 2-4 years in a postdoctoral post before being eligible to seek an academic position.

The path to becoming a tenured college professor is arduous. While a master's degree may be sufficient to qualify to teach in a two-year college, a doctoral degree is required to teach in four-year colleges and universities. In addition, post-doctoral experience is an added advantage.

For the coveted tenure-track positions, virtually every successful job candidate now boasts at least one and usually two "post-doc", each lasting an average of two years. These are necessary to remain competitive as postdoctoral positions mean gathering a good of publication record which allow the newly hired faculty to make up for the initial years of setting up an independent laboratory in the new institution. Networking is also critical in the successful landing of a first job as teaching positions in many areas (particularly the humanities) can be scarce. In the United States, though a large percentage of college faculty are employed in four-year institutions, a smaller percentage of faculty is employed as part-time or non-tenure track positions, and this percentage has risen in recent years as colleges attempt to control costs.

Once an academic position has been secured then, often some years later, the next critical step typically surrounds issues of tenure. Obviously, tenure is important and often dominates the thoughts and actions of junior academic staff. For most, this translates to a strict prioritization towards research. Having or negotiating for a faculty mentor is an important step in helping traverse through the tenure maze. Mentors may be internal (best) or external to the department, or possibly from even outside the university. The essential thing is for mentors to be pro-active on important issues whenever necessary.

Many academics find that as their research interests mature with the resultant publications the necessity for pragmatism and originality dictates those faculties devote increasing effort to pursuing research grants. Forming appropriate collaborative research relationships both within one's institution and externally often make a huge long-term difference in research productivity and by extension, academic progression. With seniority comes the impetus to write reviews and textbooks and presentations at national conferences should eventually graduate to presentations at international conferences and/or invited plenary speaking invitations. Effective networking with local institutional and international academic peers is vital. Interestingly, many academics find that their individual academic accomplishments are honored more by others outside their own institution.

### **Productivity of faculty research - an eternal challenge**

Even though teaching is a major requirement, academics see themselves as research scholars<sup>17</sup>. Junior faculty need to provide early evidence of teaching competence and scholarly abilities, both being prerequisites of promotion and tenure. Thus, academics should exert extraordinary efforts at different time points in their careers to achieve the goals of their research interests<sup>18</sup>. However, the challenge is how to manage the time dedicated for teaching<sup>19</sup>. The main thing that the junior faculty can do is to keep an eye on the tenure. It sounds cold to suggest that the struggle for tenure must

supersede human interaction and many find it difficult to prioritize hence research becomes preeminent. The second thing a junior faculty must do is identify a faculty mentor to help them through the tenure maze. A good mentor will act as the sounding board in helping junior faculty navigate the subtly nuanced language of academe. Effective mentorship is crucial to career development. Strategies to improve the availability of mentors include mentoring multiple mentees at once, compensating mentors, co-mentoring, and long-distance mentoring. The third thing a junior faculty should do is network. This can be achieved in a number of ways and in various forums, for example, through attending academic conferences and meetings and belonging to professional groups.

### **Building a successful tenure**

It is also recommended that juniors faculty would stay away from writing textbooks early on, overtime; however, they will be capable of making different contributions to the academic enterprise. They need to create intradepartmental and interdepartmental research collaborations that might compensate the limitation in the time that is dedicated for research<sup>20</sup>. They can also look for outsider junior or senior academics who have established successful research careers<sup>21</sup>. Such collaborations could be at any level as long as the goal is to produce publications in peer-reviewed journals. Neither the order of authorship nor the magnitude of contribution is an issue, but the motivation behind the collaboration is the issue<sup>20</sup>.

Of necessity, academics find they must focus on different goals at different points in their careers. Over time, increasing seniority brings additional institutional responsibilities by way of administrative appointments and faculty governance. At the outset, there is a personal need and typically some external pressure to provide early evidence of teaching competence, scholarly abilities, and to show an interest in research since these attributes are the benchmarks or prerequisites for promotion and tenure. For many, teaching and research are extensions of the same activity, namely curiosity and creativity. It seems as if both teaching and research are expressions of intellectual curiosity. Therefore, academics, in particular junior ones should negotiate the terms of their appointment to match their teaching courses to their research interests. This would enhance their teaching efficiency, shorten the time for course preparation, create time that could be dedicated to research, and overall enhance integration between teaching and research for the sake of improving student intellectual learning. Teaching and research require different skills although both are driven by curiosity but success in teaching does not necessarily relate to the success in research experience. PhD is a research degree in which the candidate learns research skills not teaching skills, a PhD holder is therefore, by necessity, an on-the-job teacher trainee.

## CONCLUSIONS

Teaching and research are the two main factors in the success of any faculty or institute. Research is mandatory to the understanding, development and advancement of science, while teaching is the corner stone for building and establishing generations of educated, and therefore, productive members of a society. Therefore, both teaching and research should, whenever possible, be seamlessly integrated into departmental activities by every faculty. However, the reality that those at assistant and associate professor levels, typically heavily prioritize establishing and advancing their career mainly in favor of enhancing their research activities. In contrast, full professors, trained in an earlier era under different criteria and pressures, and who have already established their careers, typically have simultaneously developed great teaching skills and an excellent record of research in their chosen field.

Given the relatively low ranking of teaching in the incentive and reward structure at most universities, there is little choice about which activity is more favored by junior versus senior faculty. Students, therefore, get a lot of inadequate teaching, much of it by people who could do much better and would like to, but who feel that they just cannot afford the time. Continuing one's research is particularly important in the sciences where it is often impractical to shut down a research lab. Nevertheless, even outside the sciences, cutting back on research is often impractical. Nevertheless, balancing the competing demands of research and teaching in an increasingly competitive environment remains fundamental to a successful academic career. Balancing teaching-research relationship dilemma would improve both teaching effectiveness and research productivity in higher institutions through recruitment of academics that are committed to balancing research and teaching relationship effectively.

## ACKNOWLEDGMENTS

Authors are grateful to Dr. Basil Al-Shaikh for his input in the preparation of this manuscript.

## REFERENCES

1. Magner DK, 1994 The Chronicle of Higher Education 40:18.
2. Magner KM, 1994. The Chronicle of Higher Education 40:A22.
3. Magner KM, 1997. The Chronicle of Higher Education 44:A18-A19.
4. Berdahl RO, et al., 1999. Social, political, and economic challenges Baltimore: Johns Hopkins University Press 70-88.
5. Meiland J, 1994. ASHE-ERIC Higher Education Report 26(1): 1-101.
6. LEE R, 1992. Journal of Geography in Higher Education 16:3-5.
7. Ramsbottom-Lucier MT, et al., 1994. Acad Med 69:152-154.
8. Refinetti R 1997. Am J Physiol. 272:S51-52.
9. Refinetti R, 1997. Am J Physiol. 272:S31-35.
10. JENKINS A, et al., 1998. Studies in Higher Education 23:127-141.
11. JENSEN J, 1988. Higher Education 17:17-26.

12. ENSEN J, 1988. Higher Education 17:17-26.
13. Gladieux LE, et al., 1999. Social, political, and economic challenges Baltimore: Johns Hopkins University Press pp. 151-182.
14. Zusman A, 1999. Social, political, and economic challenges Baltimore: Johns Hopkins University Press pp. 109-148.
15. WEBSTER D, 1985. Educational Record 66:60-63.
16. Wolyniak MJ, 2003. Cell Biol Educ. 2:228-232.
17. Shils E, 1997. In E Shils (Ed). The order of learning: Essays on the contemporary university New Brunswick, NJ: Transaction pp. 1-38.
18. Wenzel TJ, 2001. Council on Undergraduate Research Quarterly 21:104-107.
19. Winkler AM, 1992. The Chronicle of Higher Education 38:B1-B2.
20. Steiner JF, et al, 2002. Acad Med 77:712-718.
21. Sciscione AC, et al, 1998. Obstet Gynecol 91:1023-1026.

## BIOMEDICAL RESEARCH OPPORTUNITIES IN AFRICA

*Compiled by Vincent K. Tsiagbe, Ph.D.*

### Funding boost for African science

The Wellcome Trust, the largest charity in the United Kingdom, was reported by Anjali Nayar (July 1, 2009 issue of Nature) to have pledged £30 million (US\$50 million) to support health research at more than 50 African institutions. The charity was reported to have unveiled the grant package on 2 July. The money will be channeled through seven new international and pan-African consortia, each led by an African research institution, and spread across 18 countries on the continent.

It will be used to revamp laboratories, to train laboratory personnel and to fund grants. The trust hopes that the consortia will develop into thriving research communities that benefit public health by methods such as reducing infectious diseases and improving sanitation. Better-equipped labs and improved career prospects for researchers should also help to stem the brain drain of Africa's most able scientists.

Seven research consortiums, picked out of 88 initial applications, will use the funds to bolster research activities in a range of fields, from infectious disease to environmental health. Each consortium consists of several universities and research institutions within Africa, which have forged partnerships with universities in the UK, Australia, Europe or the US. Newton Kumwenda, epidemiologist at the University of Malawi, will lead one such consortium, which will receive £6 million to boost research at the University of Malawi the University of Zambia and the University of Zimbabwe (as reported by Charlotte Schubert in Vol. 15 2009 issue of Nature Medicine). Much of the money will go to funding

individual research projects and constructing education programs for masters, PhD and postdoctoral researchers.

## **The G8's promise to poor countries**

G8 leaders were quoted by Nature News to have promised to dedicate US\$20 billion over three years to food security around the world. The money will be spread between emergency food aid and investment in agriculture. The latter push mirrors, and was influenced by, the approach of the three-year-old Alliance for a Green Revolution in Africa (AGRA), funded by the Bill and Melinda Gates Foundation in Seattle, Washington, the Rockefeller Foundation in New York and the UK Department for International Development. Namanga Ngongi, the first president of AGRA, based in Nairobi, indicated to Nature News that he wished he knew how much of it is new money and how much is old money that is being kept alive. "Even if it is a re-commitment of old money, it is very much welcome".

Namanga Ngongi noted that prioritization is difficult; "Africa is a continent, not a country". He indicated that seeds would be a high priority: "seeds that are high-yielding, resistant to a variety of insects and diseases and able to withstand the vagaries of climate change, which is really upon us now. We also need new farming systems that respond to the exigencies of climate change". We must move from heavy tillage of land to conservation agriculture; move from using just inorganic fertilizer - although this is also badly needed - to biological nitrogen fixation by legumes and organic matter. He expressed the need to reconsider how to use Africa's intercropping system with these new high-yielding varieties, which need different associations of crops. There is a need for research also in sociology to find ways of packaging innovations so they can be better accepted by the farming populations.

## **BIOMEDICAL NEWS FROM AFRICA**

*Compiled by Vincent K. Tsiagbe, Ph.D.*

### **Accreditation for African disease labs**

Many pathology labs in Africa are currently unaccredited, as noted by American Society for Clinical Pathology. An accreditation system that aims to raise standards of disease diagnosis in African medical laboratories was initiated in Kigali, Rwanda, in July 2009. The process (as reported by Linda Nordling, Nature News of July 29, 2009) developed by the World Health Organization in collaboration with the US government, will allow African pathology labs to move up a five-point scale as they improve their quality of service, with a 'five-star' rating being equivalent to a good lab in a developed country.

This is the first time African governments are presented with an alternative to the 'pass or fail' accreditation systems used by many developed countries. Although there have been several attempts to boost laboratory standards in Africa, none have tailored the accreditation mechanisms to the continent's unique challenges.

The process is being launched alongside a program that will see volunteers from the American Society for Clinical Pathology and the Clinton HIV/AIDS Initiative to train African lab workers.

It was observed that the poor quality of African public-health laboratories has been a weakness of international health programs, such as the Global Fund to Fight AIDS, Tuberculosis and Malaria or PEPFAR, the US HIV/AIDS relief program. Without laboratory support, patients risk being given the wrong treatments, which among other things can contribute to drug resistance.

There are only 28 accredited laboratories in sub-Saharan Africa excluding South Africa, all of them belonging to the private sector or to international research organizations.

Rwanda, for example, a country with more than 10 million inhabitants, has only one internationally accredited lab and merely a few dozen qualified lab technicians.

A survey carried out by the Centers for Disease Control and Prevention (CDC) – the US agency implementing the new accreditation program – estimates that 60 currently unaccredited African laboratories will gain a rating of between three and five stars over the coming two years under the new system, suggesting they are at least nearly as good as an average lab in the developed world.

Since Lab results are only useful in the hands of a physician who can interpret the results, these steps would need to be followed by a coherent training program that prepares the physicians to decipher the information contained in "high quality lab data".

### **Noguchi Memorial Institute for Medical Research hosts 30th anniversary celebrations**

The Noguchi Memorial Institute for Medical Research (NMIMR) has launched its 30th Anniversary celebrations in Accra. The NMIMR, a research institute of the College of Health Sciences of the University of Ghana, Legon, was donated by the government of Japan to the people of Ghana on November 24, 1979 in memory of Dr. Hideyo Noguchi. Dr. Noguchi, was a Japanese medical scientist who died in Accra of yellow fever in 1928, while conducting research to find a cure for the disease. As part of the celebrations, NMIMR will host the 2nd Ghana Biomedical Convention from 12th to 14th August.

## HEALTH NEWS FLASH

*Culled from indicated sources, by Momoh A. Yakubu, PhD*

### New drug application and approval

**U.S.FDA approves NEXTERONE® (amiodarone HCl) Injection (formerly PM101)**, a novel, patent-protected, cosolvent-free formulation of the antiarrhythmic agent Amiodarone IV. The drug developed by Prism Pharmaceutical <http://www.prismpharma.com>, was originally marketed as Cordarone® Intravenous in the US by Wyeth. NEXTERONE is indicated for the treatment and prophylaxis of frequently recurring ventricular fibrillation and hemodynamically unstable ventricular tachycardia in patients refractory to other therapy. NEXTERONE was developed in a bid to overcome the practical limitations and adverse reactions associated with the use of Amiodarone IV which stem from the presence of polysorbate 80 and benzyl alcohol (cosolvents) while preserving its antiarrhythmic beneficial effects. NEXTERONE is developed as a ready-to-use premixed bags and a pre-filled syringe to address medication management issues in the hospital environment. NEXTERONE is intended for hospital use only. It should be administered only by experienced physicians in the treatment of life-threatening arrhythmias, thoroughly familiar with the risks and benefits of intravenous amiodarone therapy, and with access to facilities adequate for monitoring the effectiveness and side effects of treatment. The most important treatment-emergent adverse effects associated with intravenous amiodarone therapy includes hypotension, asystole/cardiac arrest/electromechanical dissociation (EMD), cardiogenic shock, congestive heart failure, bradycardia, liver function test abnormalities, ventricular tachycardia, and atrioventricular block. NEXTERONE is contraindicated in patients with known hypersensitivity to any of the components of NEXTERONE, including iodine, or in patients with cardiogenic shock, marked sinus bradycardia, and second- or third-degree AV block unless a functioning pacemaker is available.

**Anti-obesity patent issued.** A US Patent (U.S. Patent No. 7,462,626) has been issued to Orexigen® Therapeutics, Inc. (<http://www.Orexigen.com/>). Orexigen, a biopharmaceutical company who is focused on the treatment of obesity has received the patent for what the Company refers to as the "Weber/Cowley methods patent". The patent provides cover for Contrave®, the Company's lead obesity product candidate now in Phase 3 clinical trials. The Weber/Cowley methods involves treating obesity with combinations of bupropion and naltrexone, the two active agents in Contrave which is a companion to the Weber/Cowley composition patent (U.S. Patent No. 7,375,111) issued in May 2008. The patent broadly covers sustained release (SR) compositions of bupropion and naltrexone combined in a single dosage form. The Weber/Cowley methods patent will provide protection for

Contrave through mid 2024. Contrave is an investigational oral weight loss medication with two levels mechanism of action within the central nervous system -one controls the balance of food intake and metabolism and another controls food preference and cravings (acting on the reward center). From this patent, Contrave may be the first treatment for obesity to target these reward centers. In clinical trials, Contrave is believed to initiate and sustain significant weight loss over one year of treatment probably via appetite reduction and increasing metabolism resulting in a net weight loss. Contrave is currently being studied in four Phase 3 trials of which results are expected by mid-2009.

**Ryzolt(Tm)** (Tramadol HCL Extended Release Tablets) approved for Chronic Pain. Labopharm's once-daily formulation of the analgesic tramadol, has been approved by the U.S. FDA. RYZOLT is indicated for the management of moderate to moderately severe chronic pain in adults who require around-the-clock treatment of their pain for an extended period of time. RYZOLT is a centrally acting analgesic composed of a dual-matrix delivery system with both immediate-release and extended-release characteristics. RYZOLT will be launched through Labopharm's USA marketing partner, Purdue Pharma L.P., in 100 mg, 200 mg and 300 mg dosage strengths tablets in the second quarter of 2009. The approval of RYZOLT is the first U.S. FDA approval that Labopharm Inc, has obtained for a medication using its patented Contramid® controlled-release technology for oral administration of solid dosage medications. Contramid technology can be employed in a wide range of complex, small, highly water soluble molecules to control their release over a 24-hour period with a desired pharmacokinetic profile.

**Acurox(R)**, immediate release opioid analgesic tablet application has been submitted to the U.S.FDA by Acura Pharmaceuticals, Inc. and King Pharmaceuticals, Inc. The New Drug Application (NDA) for Acurox(r) (oxycodone HCl/niacin) Tablets submitted to the U.S. FDA will be the first FDA approved immediate release opioid analgesic designed to deter swallowing excess quantities of tablets and other common methods of misuse and abuse. However, according to the National Survey on Drug Use and Health, immediate-release opioids are 10 times more frequently abused than extended-release opioids. Acurox(r), a patented, orally administered, immediate release tablet containing oxycodone HCl is proposed for the relief of moderate to severe pain. Acurox(r) utilizes Acura's patented Aversion(r) Technology, which is designed to deter misuse and abuse by intentional swallowing of excess quantities of tablets, intravenous injection of dissolved tablets and nasal snorting of crushed tablets. The NDA submission for Acurox(r) Tablets includes positive results from several studies.

**Antibiotics approved.** Approval has been granted by U.S.FDA for Sterile Vancomycin HCl USP, 500 mg/vial, 1

g/vial and Sterile Vancomycin HCl USP, 5 g/vial Pharmacy Bulk Package. This approval results from the Joint Venture between Akorn Inc and Strides Arcolab Limited in 2004 for the sole aim of developing liquid, lyophilized and dry powder formulations of generic injectable products targeting several therapeutic markets with a major focus on anti-infectives, analgesics and CNS medicines.

**Recall: Duragesic(R)** (fentanyl transdermal system) CII patches sold by PriCara in the United States and one lot of 50 mcg/hr fentanyl patches sold by Sandoz Inc. in the United States are being voluntarily recalled as a precaution from wholesalers and pharmacies. The recall is being conducted in cooperation with the U.S. FDA was due to the identification of condition in the manufacturing equipment - a cut-system defect in a small number of affected patches in the lots being recalled. This defect has been corrected claimed the manufacturer. The condition resulted in ALZA Corporation of Mountain View, CA, an affiliate of PriCara, manufactured the patches being recalled. DURAGESIC 50 mcg/hr (fentanyl transdermal system) patches and Sandoz Inc. 50 mcg/hr fentanyl transdermal system patches being recalled may have a cut along one side of the drug reservoir. The result is possible release of fentanyl gel from the gel reservoir into the pouch in which the patch is packaged, exposing patients or caregivers directly to fentanyl gel.

DURAGESIC, fentanyl is a potent Schedule II opioid medication. Fentanyl patches that are cut or damaged in any way should not be used. Exposure to fentanyl gel may lead to serious adverse events, including respiratory depression and possible overdose, which may be fatal. Anyone who comes in contact with fentanyl gel should thoroughly wash exposed skin with large amounts of water only; do not use soap, alcohol, lotions, oils or other products to remove the medicine gel because they may increase the medicine's ability to go through the skin. Immediately dispose of patches with cut edges by flushing them down the toilet, using caution not to handle them directly. Patches with a cut edge that have leaked gel will not provide effective pain relief. Anyone who has 50 mcg/hr DURAGESIC or 50 mcg/hr Sandoz Inc. fentanyl patches should check the box or foil pouch to see if they have patches from the recalled lots. Cut patches should not be handled directly. <http://www.duragesic.com>

DURAGESIC is used to manage persistent moderate to severe chronic pain that needs to be treated around the clock and which cannot be treated by: combination narcotic, short-acting, or non-narcotic pain treatment products. It should only be used by people who are receiving or have developed a tolerance to pain therapy with opioids. DURAGESIC should not be used if patients have pain that will go away in a few days, such as pain from surgery, medical or dental procedures, or short-lasting conditions.

**Generic HIV drug in the pipeline.** Generic Version of The Antiretroviral Zerit® Capsules: Stavudine Capsules a generic version of Zerit® Capsules manufactured by the Matrix Laboratories Limited, the India-based subsidiary of Mylan Inc. has received final approval from the U.S. FDA. Stavudine Capsules, indicated for the treatment of HIV-1 infection in combination with other antiretroviral agents, are the generic version of Bristol-Myers Squibb's Zerit® Capsules. Stavudine Capsules USP comes in doses of 15 mg, 20 mg, 30 mg and 40 mg. Stavudine Capsules, indicated for the treatment of HIV-1 infection in combination with other antiretroviral agents, are the generic version of Bristol-Myers Squibb's Zerit® Capsules. This product had annual U.S. sales of approximately \$54 million for the 12 months ending Sept. 30, 2008, for the noted strengths, according to IMS Health.

**Ibuprofen PM approved.** Perrigo Company (<http://www.perrigo.com>) has received final approval from the U.S.FDA for over-the-counter (OTC) Ibuprofen and Diphenhydramine Citrate Tablets, 200/38 mg. The product which is similar to the Wyeth Advil® PM tablets, 200/38 mg, will be marketed under store brand labels and is indicated as a pain reliever (NSAID)/nighttime sleep-aid.

**Oral contraceptive approved.** Generic oral contraceptive has been approved for Watson Pharmaceuticals, Inc. The U.S.FDA gave the final approval for desogestrel/ethinyl estradiol and ethinyl estradiol tablets (USP, 0.15 mg /0.02 mg). Desogestrel/ethinyl estradiol and ethinyl estradiol tablets, USP, is the generic equivalent to Duramed Pharmaceuticals' Mircette® low-dose monthly oral contraceptive product which is indicated for prevention of pregnancy. Watson product will be marketed under the trade name Azurette.

## Some top medical stories of 2008

**Statins for Primary Prevention of Cardiovascular Disease.** The JUPITER Study - showed that "Among patients with high CRP levels, rosuvastatin lowered risk for adverse cardiovascular events." This study has the potential to change prevention recommendations for millions of patients. This industry-sponsored JUPITER study - which investigated the role of statins in primary prevention of cardiovascular diseases in patients who do not have markedly elevated cholesterol levels but have elevated high-sensitivity C-reactive protein (hsCRP). The subjects (18,000) selected had normal LDL-cholesterol levels (<130 mg/dL), without known cardiovascular disease but with high sensitive-CRP levels ( $\geq 2$  mg/L). The study groups were devoid of people with known cardiovascular risk factors (e.g., diabetes, uncontrolled hypertension, or various chronic diseases; those on cholesterol-lowering drugs) were randomized to receive rosuvastatin (Crestor; 20 mg, daily) or placebo. Due to very positive results for rosuvastatin the

study was stopped early after a median follow-up of 1.9 years- indicating rosuvastatin lowered LDL-cholesterol levels 50% and hsCRP levels by 37%. The incidence of primary endpoint (first major cardiovascular event such as unstable angina, myocardial infarction, stroke, arterial revascularization, or death from cardiovascular causes was significantly lower in the rosuvastatin group than in the placebo group (hazard ratio, 0.56), as was overall mortality (HR, 0.8). About six fewer primary-endpoint events and three fewer deaths occurred for every 1000 patients on rosuvastatin per year of the study. Incidences of physician-reported diabetes and glycosylated hemoglobin levels were both significantly higher in the rosuvastatin group than in the placebo group. Thus, statins lowered the rate of adverse CV events in this large study of apparently healthy subjects who were at CV risk because of high hsCRP levels, however, higher incidence of diabetes were reported for the statin group. Nonetheless, these data will certainly prompt review of current guidelines on use of statins in primary prevention, as well as generate interests about hsCRP testing.

*Dr. Yakubu is the Editor of the BioMed Scientist. He is a Senior Scientist/Associate Professor in the Center for Cardiovascular Diseases, Texas Southern University College of Pharmacy and Health Sciences, Houston, TX-USA.*

## **AABS ANNOUNCEMENTS:**

### **AABS General Meeting 2010**

**VENUE:** Washington DC

**ROOM & DATE:** To be decided

## **OPPORTUNITIES FOR RESEARCH AND TRAVEL:**

### **Minority Access to Research Careers (MARC)**

<http://marc.faseb.org/>

## **MEETING ANNOUNCEMENTS**

### **2009, October 6-9**

#### **Placenta: The Key to Pregnancy Success (IFPA Meeting 2009), Adelaide, Australia**

*Information:* Nina Cosgrove, IFPA 2009 Conference Secretariat, Elsevier, The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, UK. Tel.: +44 (0) 1865 843297; Fax: +44 (0) 1865 843958; Email: n.cosgrove@elsevier.com; *Internet:* <http://www.ifpaconference.org/2009/>

### **2009, October 15-16**

#### **Synaptic Inhibition in Health and Disease, Chicago, IL**

*Information:* *Internet:* <http://www.abcam.com/go.cfm?p=3815>

### **2009, October 16-17**

#### **Frontiers in Microcirculation: Control Processes and Clinical Applications, Columbia, MO**

*Internet:* [http://muconf.missouri.edu/mcs\\_mu2009/](http://muconf.missouri.edu/mcs_mu2009/).

### **2009, October 17-19**

#### **The 2nd International congress on Image and Signal Processing (CISP 2009) and the 2nd International Conference on BioMedical Engineering and Informatics (BMEI 2009), Tianjin, China**

*Information:* Email: [cisp2009@tjut.edu.cn](mailto:cisp2009@tjut.edu.cn)

*Internet:* <http://www.tjut.edu.cn/cisp-bmei2009>

### **2009, October 27-30**

#### **2nd International Fascia Research Congress, Amsterdam, The Netherlands.**

*Information:* Faculty of Human Movement Sciences, Van der Boechorststraat 9, NL - 1081 BT Amsterdam. Tel.: +31 20 59 82000; Fax: +31 20 59 88529;

Email: [info@fasciacongress.org](mailto:info@fasciacongress.org)

*Internet:* <http://www.fasciacongress.org/2009>

### **2009, November 2-5**

#### **Microbial Biotechnology for Development, Marrakech, Morocco**

*Information:* *Internet:* <http://www.ucam.ac.ma/microbiona/>

### **2009, November 16-19**

#### **Chromatin: Structure & Function Conference 2009, Guanacaste, Costa Rica**

*Information:* *Internet:* <http://www.abcam.com/go.cfm?p=4406>

### **2009, December 5-9**

#### **49th Annual Meeting of the American Society for Cell Biology, San Diego, CA**

*Internet:* <http://www.ascb.org/meetings/>

### **2009, December 14-15**

#### **Drug Discovery Workshop**

**Strand Campus, King's College London, UK**

**CPD = 9 credits**

*Program Download:*

<http://www.bps.ac.uk/uploadedfiles/Diploma/DrugDiscoveryProgrammeDraft300609.doc>

*Online Registration:*

<http://www.bps.ac.uk/site/cms/contentCategoryView.asp?category=396>

### **2009, December 14-16**

#### **Cellular & Integrative Neuroscience Themed Meeting, Cardiff, United Kingdom**

*Information:* Tel.: +44 (0) 207269 5710; Email:

[meetings@physoc.org](mailto:meetings@physoc.org) ;

*Internet:* <http://www.physoc.org/meetings>

**2009, December 15-17**

**BPS Winter Meeting 2009**

**The Queen Elizabeth II Conference Centre, London, UK**

*Abstract submission:* open 28 August - 28 September.

*First Announcement:*

<http://www.bps.ac.uk/uploadedfiles/meetings/WinterMeeting20091stAnnouncement.pdf>

*Sponsorship and Exhibition Prospectus:*

<http://www.bps.ac.uk/uploadedfiles/meetings/Winter2009SponsorshipandExhibitionProspectus.pdf>

*Provisional Program:*

<http://www.bps.ac.uk/uploadedfiles/meetings/WinterMeeting09Programme.pdf>

**2010, February 15 - 18**

**The Con-Joint Meetings of Biology and Synchrotron Radiation (BSR) and Medical Applications of Synchrotron Radiation (MASR), Melbourne, Australia**

*Internet:* <http://www.masr2010.org>

**2010, March 17- 20**

**XVIII World International Family Therapy Association (IFTA) Congress, Buenos Aires, Argentina**

*Information:* Victoria Tomskey, CLA 2010 - Industry Liaison & Sales, Paragon Conventions - Part of Liberty International Group, 18 Avenue Louis Casai; 1209 Genève, Switzerland. Tel: +41 (0)22-5330-948; Fax: +41(0) 22-5802-953; Email:

[vtomskey@paragon-conventions.com](mailto:vtomskey@paragon-conventions.com);

*Internet:* <http://www.paragon-conventions.net/IFTA2010/>

**2010, March 21- 25**

**6th World Congress for Neurorehabilitation, Vienna, Austria**

*Internet:* <http://www.wcnr2010.org>

International Stroke Conference 2010

Nursing Symposium: Feb 23

Sessions: Feb. 24-26

Exhibits: Feb. 24-25

San Antonio, Texas

*Extended Abstracts Deadline:* Aug. 10, 8 p.m. CDT

**2010, May 19 - 21**

**Quality of Care and Outcomes Research in Cardiovascular Disease and Stroke Conference 2010**

Omni Shoreham Hotel - Washington, DC

**2010, September 2 - 4**

**6th International Muscle Symposium, Vienna, Austria**

*Internet:* <http://www.musclesymposium2010.at>

**2010, August 4 - 7**

**APS Intersociety Meeting: Global Change and Global Science: Comparative Physiology in a Changing World Westminster, Colorado**

*Internet:*

<http://www.the-aps.org/meetings/aps/comparative/index.htm>

**2010, August 25-28**

**APS Conference: Inflammation, Immunity and Cardiovascular Disease**

**Westin Westminster, Colorado**

*Internet:*

<http://www.the-aps.org/meetings/aps/inflammation/>

**2010, July 17- 23**

**WorldPharma 2010**

**16th World Congress on Basic and Clinical Pharmacology**

**Copenhagen, Denmark**

*Download Flyer:*

<http://www.bps.ac.uk/uploadedfiles/meetings/IUPHARFlyer.pdf>

*Internet:* <http://www.worldpharma2010.org/>

**2010, April 24 - 28**

**Experimental Biology (EB), 2010**

**(APS, ASBMB, ASPET, ASIP, ASN, AAA)**

**Anaheim, CA**

*Internet:* <http://experimentalbiology.org/content/default.aspx>

**2010, May 8 - 12**

**CYTO 2010 (International Society for Advancement of Cytometry), Seattle, WA**

*Internet:*

<http://cytoconference.org/pages/aboutIAC2010.aspx>

**2010, July 29 - 31**

**17th Ovarian Workshop**

**Milwaukee, Wisconsin**

*Internet:* <http://ovarianworkshop2010.org/>

**2011, April 9 - 13**

**Experimental Biology (EB), 2010**

**(APS, ASBMB, ASPET, ASIP, ASN, AAA)**

**Washington, DC**

**2012, April 21 - 25**

**Experimental Biology (EB), 2012**

**(APS, ASBMB, ASPET, ASIP, ASN, AAA)**

**San Diego, CA.**

## **RELOCATION OF AABS MEMBERS**

Dr. Sunny E. Ohia has moved to Texas Southern University as the new Vice President of Academic Affairs and Provost. He was the dean of the College of Pharmacy at the University of Houston, where he had 16 years of academic leadership experience. Dr. Ohia is also one of the founding Board members of AABS, Inc. The Board of Trustees, on behalf of AABS, wishes to congratulate Dr. Ohia for this prestigious achievement.

## **ADVERTISEMENT FOR BOOK PUBLISHED**

### **Immigration and health**

*Edited by Ajayi, A.A , MD, PHD; and Ajayi, A.T., MD, FAAP*

Drs. Adesuyi Ajayi & A.T. Ajayi, who are members of AABS, Inc, have published an evidence based book that discusses the impact of immigration on the health of all immigrants coming to the USA, and how environment, genes, and social factors impact the adaptation. The chapters cover: 1) Who is coming from where; 2) Consequences of leaving area of nativity; 3) Mortality by ethnicity; 4) Influence of genes on disease progression; 5) Influence of ethnicity on response to drug therapy of diseases; 6) Health maintenance and promotion for immigrants; 7) Immigration and women, pregnant women and children; 8) Travel Medicine; 9) Summary and recommendations. The book is designed to help immigrants to stay healthy, physically and mentally.

The book is available on Amazon.com, and at Barnes & Nobles, Authorhouse, and Borders. The URL for Barnes & Noble is: <http://search.barnesandnoble.com/Immigration-and-Health/Adesuyi-A-Leslie-Ajayi-and-Abimbola-T/e/9781434391292/?itm=1> .