REPORT ON THE 3RD ZETA-12 SCIENTIFIC CONFERENCE HELD IN COLLABORATION WITH SQA (<u>www.sqa.org</u>) AND AGCPN (<u>www.agcpng.org</u>) ON WEDNESDAY 12TH TO FRIDAY 14TH, NOVEMBER, 2008 AT

- Ikem, Isi-Uzo Local Government Area, Enugu State, Nigeria and,
 - The Faculty of Business Administration Lecture Auditorium, University of Nigeria Enugu Campus, Nigeria.

Theme: Quality Issues in Biomedical Research and Drug Development: The role of GxPs (GCP, GLP, GCLP, and GMP) in Quality Health Care Packaging and Delivery.

INTRODUCTION:

This 3rd ZETA-12 Scientific Conference came on the heels of a series of successful outings by the ZETA-12 Group in her efforts to impact the scientific, academic, research communities, government stakeholders and policy makers at various levels in Nigeria. ZETA-12 started as a Sub-group of the Medical Students Research Group (MESREG) of the Nnamdi Azikiwe University, Nnewi Campus, Nigeria in 2004, under the mentorship of Prof Orish Ebere Orisakwe. So far two annual scientific conferences/meetings have been held with profound success, in addition to other major research activities/outings. This third meeting was organised in collaboration with the Nigerian Chapter of Society of Quality Assurance (NRCSQA), a group established in July 2008 and the Association for Good Clinical Practice in Nigeria (AGCPN) which has been collaborating with ZETA-12 since 2007. The conference provided a great opportunity to build upon the precepts established during previous meetings and to introduce the "gospel of quality research" to a relatively new environment and set of individuals, naïve to the existence and vision of both ZETA-12 and SQA; hence the choice of University of Nigeria, Enugu Campus as the venue for the main conference.

PLANNING:

The recently concluded September 2008 AGCPN Train-the-trainer program in which several ZETA-12 and NRCSQA members attended gave us the opportunity to meet at Enugu, the coal city to articulate the ZETA-12 event. The Association for Good Clinical Practice in Nigeria- (AGCPN) is the premier Good Clinical Practice Initiative in Nigeria, which is committed to expanding the Clinical Trial Infrastructure in Nigeria. The collaboration between ZETA-12 and AGCPN has been rewarding, especially with respect to the successful facilitation of the recent inauguration of the regional chapter of SQA in Nigeria. Thus the trio accepted to collaborate in the execution of this $3^{\rm rd}$ ZETA-12 conference.

PUBLICITY:

Calls for Session proposals and abstracts were made initially through emails. Abstracts were received from Nigeria, the Republic of Cameroon, Ireland and the United States of America. Locally, invitation letters and posters were used in the

South-East Zone of Nigeria. The posters designed after the manner of the previous year, contained the details of the *Pre-Conference Seminar* at *Ikem, Isi-Uzo L.G.A* of *Enugu State* as well as the conference proper at the *Faculty of Business Administration lecture Auditorium, of the University of Nigeria Enugu Campus (UNEC).* The theme of the Pre-Conference Seminar was "The role of Community-Based Research Projects (CBRP) in nation building". This Pre-conference theme actually delighted many people within and beyond Nigeria. Participants attended from several states of the federation including Abia, Anambra, Ebonyi, Enugu and Imo States.

The venue of the Pre-conference seminar was provided by the Isi-Uzo Local Government Council which also hosted the event. The main two-day conference held at the Faculty of Business Administration Lecture Auditorium of the University of Nigeria Enugu Campus, courtesy of the Dean Faculty of Business Administration, Prof (Mrs) Modum U. These venues were given free.

FUNDING:

The conference was funded by dedicated members of ZETA-12 who contributed Five Thousand Naira (\(\frac{\mathbb{H}}{3}\), 000. 00) initially. Other funds that were raised accrued from the optional conference registration for non-members; we resolved to give everybody the privilege to participate with or without registration. New students, joining ZETA-12 also registered with the sum of One Thousand Naira Only (\(\frac{\mathbb{H}}{4}\)1, 000.00). In the course of the conference, our guest and adviser Dr Emmanuel O. Nna also made huge financial contributions to the event. We remain very indebted to his benevolence.

DAY 1-Pre-Conference Seminar: Wednesday, 12th November, 2008.

THEME: "The Role of Community-Based Research Projects (CBRP) in Nation Building".

LOCATION: Ikem, Isi-Uzo L. G. A., Enugu State, Nigeria.

An eleven-member ZETA-12 team took off from the University of Nigeria Enugu Campus by midmorning of Wednesday to Ikem, a town in Isi-Uzo Local Government Area. Isi-Uzo is within Enugu East Zone, and is accessible through the Protea-Nike lake Resort road in Enugu. The team constituted of practicing medical doctors, medical laboratory scientists, a geographer, a physiotherapist and our London-based international faculty-Dr Emmanuel O. Nna who is a Clinical Scientist with Imperial College London. A journey about two hours plagued by the poor road network turned out to be a fulfilling one. We were saved the great discomfort of the dusty terrain because of the Air-condition bus we rode on. The journey would not have taken so long but for the bad terrain; the entire roads in Isi-Uzo Local Government Area are to this day un-tarred. It is encouraging to note however that bulldozers and graders were seen working on the roads, courtesy of the Isi-Uzo Local government Council. At the Isi-Uzo Local Government border, we stopped to see some local streams which are tributaries to the River Ebenyi, the main subject of the *Ikem Water Project (IWP)* study.

On arrival we were received by the senior staff of the Isi-Uzo Local Government Area who were excited at the prospects of the study ZETA-12 was about to embark upon. We had the opportunity to visit the banks of the river where the villagers fetch water. Two community representatives (Mr Samuel Okwor and Cletus Ugwuodo) were on hand to intimate us on the water usage patterns of Ikem people. Basic enquiries were made as to the source of drinking water for the communities, maintenance of year-round supply, local purification techniques e.t.c.

The team also visited the *District Hospital at Ikem*-which was said to serve many communities within the five (5) towns in Isi-Uzo Local Government Area. Some of the buildings were nearly collapsed, dilapidated and the ceilings heavily perforated. The facility was said to serve about twenty thousand or more people, and yet does not have an active emergency unit. Some basic services were sustained by individual philanthropic efforts. However we gathered that both the Isi-Uzo Local Government Council and the Enugu State Government have initiated measures for the immediate revampment of the facility.

We finally got back to the Isi-Uzo Local Government Council Hall, where we met with the waiting audience among who were community and local government leaders. The reception was warm and very enthusiastic. After detailed introduction of the visiting team and the hosting communities, Dr Emmanuel Nna gave the people a keynote speech on the "The role of Community-Based Research **Projects (CBRP) in nation building**". Our proposed project (IWP) on studying the water bodies and water usage patterns of Ikem and Isi-Uzo people was elaborately explained to the people. They were also intimated on the possible areas that ZETA-12 could assist in promoting Good Clinical Practice and proper Health Care packaging and delivery at the Ikem District Hospital. A detailed series of discussion ensured afterwards with both the Chairman of the Local Government, Dr Samuel Chijioke Ugwu and other members of his executive council contributing immensely. The hallmark of the occasion was the declaration of the Isi-Uzo Local Government Council of their readiness to give ZETA-12 their full support in any Community-Based Research Project (CBRP) that may help the rural populace. Other individuals, both leaders and villagers also pledged their support. We thus succeeded in perfecting our "community consenting procedure" ahead of the inception of the **ZETA-12 IWP**, a project that was approved by the Local Government council in 2006 and which involves experts both from USA and UK. The ZETA-12 team departed for Enugu by evening time same day after a brief refreshment in the Chairman's lodge. (See photographs).



The Executive Chairman of Isi-Uzo L.G.A, Dr Sam C. Ugwu poses with his council, the ZETA-12 team and other people of Ikem and Isi-Uzo.



The Chairman making remarks and pledging the Council's support to ZETA-12, flanked by Dr Emmanuel Nna O (Guest Speaker) and Dr Oragwu Chikelue- ZETA-12 President (clapping).

CONFERENCE PROPER

DAY 2- Thursday, 13th November, 2008.

LOCATION- Faculty of Business Administration Lecture Auditorium, University of Nigeria, Enugu Campus.

The main conference started after an opening prayer with series of welcome speeches from the stakeholders. The President of ZETA-12 Research Group, *Dr Oragwu Chikelue Ifeanyichukwu*, in the course of his speech gave the history of the group, her focus and interests which he described as rapidly enlarging, to accommodate the current needs of the times and that of our people. He expounded on the expected means to achieve these goals which include networking and affiliating with other research groups, both within Nigeria and with the international community. He acknowledged all who played one role or the other to make the day a possibility. The President of the Nigerian Chapter of SQA (NRCSQA), Dr Obi Ejeatuluchukwu also gave a welcome speech and read the SQA Congratulatory message to ZETA-12, on behalf of MaryEllen Lander, RQAP-GCP (President) and Elliott Graham, RQAP-GLP (Executive Director) of SQA, USA.

The session Chair was Prof Orish Ebere Orisakwe, the ZETA-12 mentor and a Consultant Toxicologist with the Nnamdi Azikiwe University, Nnewi Campus. This first day's sessions/lectures were designed to showcase the importance of academic research. Keynote lectures delivered include:

- * Challenges of Quality Assurance in citations on lymphoangiogenesis in cancer; by Prof Wilson I. B. Onuigbo, a renowned pathologist who is also an international adviser of ZETA-12. During the course of this presentation, Prof Onuigbo highlighted the need for Quality Assurance in every area/field of endeavour. He opined, in accordance with Elizabeth Dax of the Australian National Serology Reference Laboratory that "Quality Assurance is achieved by a series of processes that assure the most accurate and highest quality result; that "Quality makes sure of, Avoidance of mistakes, Consistency of performance, Data integrity, Efficiency and cost-effectiveness, Customer satisfaction and Improved opportunities for training". He showed how present-day researchers report terms like lymphoangiogenesis as if they were novel discoveries without appropriately citing older research papers that demonstrated such phenomena several decades ago. In conclusion, he advised that "Cancer carriage.....is too important a subject to be left to poor quality research... Rather, searching should be a mountain to be climbed with inquisitive intrepidity and acquisitive aspiration".
- * *Mycotoxins in Nigerian staple foods and beverages;* by Prof Ngozi Onyemelukwe; a professor of Microbiology with the Department of Medical Laboratory Sciences, Faculty of Health Sciences and Technology, UNEC, Enugu. This very interesting presentation demonstrated that some locally prepared food varieties were less prone to contamination by Mycotoxins than others. Further research into local preservation technologies was advocated by the presenter and other key participants in response to this presentation.
- * Molecular Pathology: The Application of Molecular diagnostics to Pathology.
- * Choice of House Keeping Genes for Normalization of Real time Quantitative PCR of Tumour Markers.

These two lectures were delivered by Dr Emmanuel O Nna, a clinical Scientist from Imperial College London, who is also an International adviser of ZETA-12. In the first lecture, Dr Nna explained what molecular pathology is all about: 'the use of techniques and instruments to detect size, quantify and sequence nucleic acids-DNA and RNA as well as proteins'. These molecules define human structures and functions and are intricately involved in most human diseases. He illustrated most molecular techniques in use and encouraged participants to pursue research careers in molecular medicine. He pointed out the example of Bcr-abl gene rearrangement in Philadelphia positive leukaemia, which is now easily quantified by real time polymerase chain reaction (PCR) and helps in diagnosis and monitoring of residual disease. He advised on practical ways to establish molecular diagnostic laboratories in Nigerian Universities and Hospitals.

In his second lecture, Dr Nna gave further illustrations on quality control measures in molecular diagnostics using example of the housing keeping genes. Presenting results from his research work in Prostate cancer, he showed how endogenous reference genes can be used to check sample quality, analytical process quality and reporting quality-issues which bother on quality assurance and quality control in molecular diagnostics. He highlighted the usefulness of quality assurance for interlaboratory comparison of molecular test results.

The lectures were interspersed with discussions featuring questions and answer sessions. We also had a promotional presentation from *Access Bank Plc*, on their new debit/credit visa cards. The first day event ended at about 5.20pm.

Day 3: Friday, 14th November, 2008

LOCATION- Faculty of Business Administration Lecture Auditorium, University of Nigeria, Enugu Campus.

The final day was the most exciting for the entire audience as it captured and integrated all the conference proceedings vis-à-vis the theme "Quality Issues in Biomedical Research and Drug Development: The role of GxPs (GCP, GLP, GCLP, and GMP) in Quality Health Care Packaging and Delivery". The Chair of the second day event was Prof Ifeoma Joy Okoye, a professor of Radiology with University of Nigeria Enugu Campus, and the Chairman of AGCPN/African Coordinator of CITI. Prof Okoye set the stage by giving a detailed account of how AGCPN has faired in the last 3 years towards building individual and institutional capacity for Clinical Research and Indigenous drug development. Dr Emmanuel Nna O who succeeded in "infecting" the audience with his passion for entrepreneurial research, delivered a mind blowing lecture on "The bias of Clinical Trials and the Need for Robust Legislation in Nigeria". The Executive Director of ZETA-12, Dr Maduabuchi John-Moses U who is also the Vice President of the NRCSQA gave an inspiring lecture on "Quality Assurance Profession in emerging economies; Career and job opportunities for multi-disciplines in Nigeria." This series of lectures led to a lot of deliberations and resolutions on what must be done by the regulatory authorities and research communities in Nigeria and other developing nations towards building sustainable capacity for Drug Development and Clinical Trials. The resolve of ZETA-12 to promote the GxPs among the academia and research communities was also highlighted. Of particular interest to most clinical researchers was the issue of Quality Control/Assurance in medical laboratories, re-echoing the need for capacity building in GCP/GCLP. A communiqué was also articulated on these issues. Other featured events of the day were a lecture on the "Determination of LD50: The "Up-And-Down" Procedure". by Dr Afonne OI and some paper presentations on the "Pattern Of Blood Group" Distribution Among Secondary School Students In Enugu - East, Enugu- State, Nigeria" by the first President of ZETA-12, Dr Ngozi Umeadi (nee Nzegwu) and another paper on "Waste Management Problems in Enugu Urban" Ugochukwu Ezedigboh. The Executive Director of ZETA-12 also gave a speech on behalf of Caligeo Clinical-One Vision, a US-based Contract Research Organisation which sent a good will message and abstract to the conference.

Towards the end, Dr Nna Emmanuel O, had an opportunity to speak to students and the entire audience on grant writing and funding sources for research. The conference also featured the ZETA-12 AGM/meeting of SQA members. Many of the participants expressed their interest to join the **NRCSQA** and **AGCPN** and they were told the modalities involved- an expected end of the collaborative efforts between AGCPN, SQA and ZETA-12. The meeting ended at about 4.45pm. Attendance was over 110, but 104 actually registered. (Please see photographs).



Left Picture: Cross-section of some conference participants.

Right Picture: Some ZETA-12 leaders, standing from left to right: Prof Ifeoma Okoye, (Enugu) International Adviser, Dr Oragwu Chikelue, President (Nnewi).



Prof Orish Ebere Orisakwe (Nnewi) Mentor, Dr Maduabuchi John-Moses U (Enugu), Executive Director, Dr Nna Emmanuel, (London) International Adviser, Dr Obi Ejeatuluchukwu (Nnewi), Head Bioethics and Clinical Services.

IMMEDIATE POST CONFERENCE ACTIVITIES

The sponsors, participants and guests who had honoured our invitation were written and sent short messages (SMS) to express our gratitude for their support. The reports, communiqué and books of abstracts are been circulated to interested contacts of ZETA-12. A post-conference meeting for new and old members of NRCSQA was also hosted by Prof Ngozi Onyemelukwe, at FHST, UNEC, Enugu with 9 new members joining the group.

CONCLUSION

Once again, a landmark achievement has been made by the ZETA-12 Group, primarily in sensitizing our membership and our immediate community to see the research, career and job opportunities that abound in the emerging clinical trail industry in Nigeria. The onus lies on all and sundry to nurture this passion and support groups like SQA, AGCPN and ZETA-12 in realization of our common goal.

ZETA-12 is looking forward to helping individual members build more capacity for biomedical research and in helping to attract sustainable developments to rural communities such as the community-based research projects. We know that our future events will be greater.

"To God be the Glory".

ACKNOWLEDGEMENT:

- * The Dean and Staff members, Faculty of Business Administration, University of Nigeria Enugu Campus.
- * The Deputy Vice Chancellor, University of Nigeria Enugu Campus.
- * Prof Wison I.B. Onuigbo. Consultant Pathologist, National Orthopaedic Hospital, Enugu.
- * Prof Ifeoma Joy Okoye, the Chairman AGCPN and African Coordinator, Collaborative Institutional Training Initiative (CITI).
- * Dr Emmanuel Nna O. MD, Safety Biomedicals Ltd, UK.
- * Prof Orish Ebere Orisakwe.
- * Ms Elliott Graham, RQAP-GLP, Executive Director SQA USA.
- * Ms MaryEllen Lander, RQAP-GCP President SQA USA.
- * Coordinators/members of Cameroonian Society of Toxicological Sciences (CSTS)
- * The Executives and Members of NRCSQA
- * ZETA-12 Research Counsellors/Mentors/Collaborators.
- * Caligeo Clinical-One Vision.
- * All Participants/Stakeholders.

Yours truly,

Dr Oragwu Chikelue Ifeanyichukwu President, ZETA-12.

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