

**INTERNATIONAL WORKSHOP
ON
MODERN AND EMERGING TREND IN VACCINE DEVELOPMENT
ABUJA, NIGERIA
22-24MAY 2018**

ORGANISED BY

	<p>CENTRE FOR SCIENCE AND TECHNOLOGY OF THE NON- ALIGNED AND OTHER DEVELOPING COUNTRIES (NAM S&T CENTRE) NEW DELHI, INDIA</p>
	<p>NATIONAL BIOTECHNOLOGY DEVELOPMENT AGENCY (NABDA), ABUJA, NIGERIA</p>

INTRODUCTION

It is notable that first generation vaccines are whole-organism which are either live and weakened, or killed forms such as smallpox and polio vaccines while second generation vaccines known as subunit vaccines comprise specific protein antigens (such as tetanus or diphtheria toxoid) or recombinant protein components (hepatitis B surface antigen) which were developed to reduce the risks from live vaccines. One disadvantage is that they cannot develop killer T-cells. Third generation vaccines use DNA machinery injected into the host to synthesize proteins. The proteins are recognised as foreign by the host cells and displayed on their surface, thus alerting the immune system, which then triggers appropriate immune responses. DNA vaccines certainly have numerous advantages such as: no risk for infection, antigen presentation by both MHC class I and class II molecules, polarised T-cell response toward type 1 or type 2, highly specific immune response focused on antigen of interest, ease of development and production, stability for storage and shipping, cost-effectiveness, lack of necessity for peptide synthesis, expression and purification of recombinant proteins and use of toxic adjuvants, long-term persistence of immunogen, expression of proteins that closely resembles normal eukaryotic structure, with accompanying post-translational modifications. Despite the advantages of this modern approach there are no DNA vaccines and therapeutic antibodies developed against emerging infections especially in Sub-Saharan Africa.

A more specific and current approach, DNA vaccination, or genetic immunization is a rapidly developing technology which is regarded as the third generation of vaccines offering new approaches for the prevention and therapy of several diseases of both bacterial and viral origin. It can be seen as an in vivo vaccine model. This technique protects against disease by injecting genetically engineered DNA into appropriate tissues through plasmids containing the DNA sequence encoding the antigen(s) against which an immune response is sought, and relies on the in situ production of the target antigen thus cells directly produce antigens conferring protective immunological response. It has been reported that DNA vaccines have potential advantages over conventional vaccines, including the ability to induce a wider range of immune response types. Current efforts are targeted at viral, bacterial, several cancers and parasitic diseases in humans with several vaccines available for veterinary use. The result of this technique is safe in administration and easily engineered and manufactured. DNA vaccine holds the future prospects of immunization by inducing potent cellular immune responses against infectious and non-infectious diseases derived from the protective epitope developed from the pathogen. Several studies demonstrated by a number of laboratories / research centers showed that these immune responses evoke protective immunity against several infectious diseases and cancers, which provide adequate support for the use of this approach.

In order to deliberate on the modern and emerging trends in vaccine development, the Centre for Science & Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre) jointly with the National Biotechnology Development Agency (NABDA), Nigeria announces the organisation of an International Workshop on *‘Modern and Emerging Trend in Vaccine Development’* in Abuja, Nigeria on 22-24 May, 2018.

OBJECTIVES OF THE WORKSHOP

The main objectives of this Workshop are:-

- To provide a platform and an opportunity to deliberate on the development of third generation vaccines stressing on the approach and overcoming possible limitations.
- To hold an expert discussion on tropical infections and reemerging diseases as it affects developing nations' capacity to generate candidates.
- To discuss the need to develop capacity in the developing countries for the design and development of vaccine candidates in basic and translational medicine.
- To provide opportunity to deliberate on rational vaccine business models and principles of vaccine sustainability

PROGRAMME OF THE WORKSHOP

A tentative programme of the Workshop is given below:

DATE	PROGRAMME	
Monday, 21 May 2018	Arrival of Delegates in Nigeria	
Tuesday, 22 May 2018	Inauguration	Technical Sessions
Wednesday, 23 May 2017	Technical Sessions	Technical Sessions
Thursday, 24 May 2018	Concluding Session	Field Visits
Friday, 25 May 2018	Departure of Delegates	

A detailed Session-wise Programme will be made available before the Workshop.

VENUE

The Workshop would be organized at the National Biotechnology Development Agency (NABDA), Abuja, Nigeria.

RESOURCE PERSONS

Resource persons for the Workshop will comprise experts from Nigeria and other countries.

ABOUT THE ORGANISERS

NAM S&T CENTRE

The Centre for Science and Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre; www.namstct.org) is an inter-governmental organisation with a membership of 47 countries spread over Asia, Africa, Middle East and Latin America. The Centre was set up in 1989 in New Delhi, India. It undertakes a variety of programmes, including organisation of workshops, symposiums, training courses and training workshops and implementation of collaborative projects. It also offers short-term research fellowships to scientists from developing countries in association with the Centres of Excellence in various countries. The Centre also brings out technical books and other scientific publications in different subjects of interest to developing countries. The Centre's activities provide opportunity for scientist-to-scientist contact and interaction; familiarising participants on the latest developments and techniques in the subject areas; identification of the

requirements of training and expert assistance; locating technologies for transfer between the members and other developing countries, and dissemination of S&T information etc. In addition, the Centre encourages academic-R&D-industry interaction in the developing countries through its NAM S&T-Industry Network.

NATIONAL BIOTECHNOLOGY DEVELOPMENT AGENCY (NABDA), ABUJA, NIGERIA

In recognition of the importance of biotechnology to national development, the Federal Executive Council of Nigeria approved the National Biotechnology Development Policy on 23rd of April 2001, which led to the establishment of the National Biotechnology Development Agency (NABDA) in November 2001 under the aegis of the Federal Ministry of Science and Technology to implement the policy that is aimed at promoting, coordinating, and setting research and development priority in biotechnology for Nigeria. Based on this premise, the programmes of the Agency are structured in line with the international standard bearing in mind the development of local technological contents.

Participants

The Workshop programme has been primarily designed to discuss and debate on the latest research results by the scientists, researchers and industry experts from the developing countries and innovative approaches introduced by them in the areas related to vaccine development as input for policy makers in government departments and ministries

The selection of the participants will be strictly based on merit and relevance of their current responsibilities to the subject of the Workshop as well as the quality of the extended abstract of the paper submitted by them along with the completed nomination form.

A pre-condition for participation in the Workshop is that the participants must submit the full manuscript of their papers, in **MS-Word format**, at least **14 days** before the commencement of the programme.

SUBMISSION OF APPLICATION

Experts and scientists desirous of participating in the Workshop, excepting those from India, are required to submit their nomination form **electronically** directly to the NAM S&T Centre as early as possible but latest by **Monday, 23rd April 2018**.

Applicants from Nigeria: Applicants from Nigeria should submit their requests directly to the National Biotechnology Development Agency (NABDA), Abuja, Nigeria by email to tobarthokeyibeh@yahoo.com or b.ibeh@nabda.gov.ng

The Nomination Form should be completed in all respects, typewritten or in clear handwriting in capital letters, and no column should be left blank. The following documents must be submitted as e-mail attachments:

- i. Filled in Nomination Form (blank Form enclosed)
- ii. An extended (**about 2 pages**) abstract (**in MS Word format**) of the paper that would be presented at the workshop
- iii. A short (**maximum two pages**) CV (**in MS-Word format**)
- iv. Copy of the relevant pages of the passport

The documents at (ii) and (iii) above must be in MS-Word Format; PDF or image files will not be accepted. Hard copies of the Nomination Form and the above attachments are NOT REQUIRED to be submitted.

PRESENTATION OF PAPERS

Each participant will be required to present a country status report and/or a research/scientific paper on any of the themes appropriate to the Workshop.

PUBLICATION AS A FOLLOW UP OF THE WORKSHOP

A publication edited by one or more international experts and based on the papers presented by the participants during the Workshop and also containing papers contributed by eminent experts in the field will be brought out in the form of a book as follow up of this programme. Therefore, all participants are required to submit the manuscripts of their full papers in **MS-word** format well in advance, but at least 14 days before the commencement of the Workshop.

LOCAL HOSPITALITY AND TRAVEL

Local hospitality in Nigeria including accommodation, meals and local transport for the delegates will be provided by the local organisers, National Biotechnology Development Agency, Abuja, Nigeria from **Monday, May 21st (noon) to Friday, May 25th (noon)** (i.e. from one day before to one day after the completion of the Workshop). The participants are requested to book their flights accordingly otherwise they will have to make their own arrangements of stay beyond these dates.

FINANCIAL ARRANGEMENTS FOR TRAVEL

This is being conveyed separately to each member country of the NAM S&T Centre and other developing countries.

ENTRY FORMALITIES AND IMMIGRATION

Participants of the Workshop must be in possession of a current passport or any other internationally recognized travel document, which must have a period of validity of at least six months beyond the time of stay allowed in Nigeria and must be endorsed for travel to Nigeria. Those needing visa for travel and other immigration documentation should contact the local organisers in NABDA, Nigeria for any necessary assistance.

OTHER USEFUL INFORMATION:

Climate: Rainy season with temperatures range of $30 \pm 3^{\circ}\text{C}$

Voltage: 220-240

International dial code: +234

Nigerian Standard Time is +1.00 hour ahead of GMT

The Nigerian Currency is Naira; the current exchange rate of US\$1 is approximately 361.00 Naira.

NOTE

- ***The governments/ institutions of the selected participants will be required to bear the following costs:***
 - *All expenses in the home country incidental to travel abroad, including expenditure for passports, required medical examinations, vaccinations and miscellaneous expenses such as internal travel to the airport of departure in the home country.*
 - *Salary and other related allowances for the participants during the period of the Workshop.*
 - *Cost of medical insurance to cover the period of participation in the workshop.*
- ***The organisers of this Workshop will not assume responsibility for the following expenditure in connection with the participant's attendance in the Workshop:***
 - *Expenses incurred with respect to any insurance, medical bills or hospitalisation fees.*
 - *Compensation in the event of death, disability or illness of participants.*
 - *Loss of personal belongings or compensation for damage caused to them by climatic or other conditions.*
 - *Other costs, including airport tax and excess baggage.*

Contact Details

NAM S&T CENTRE

Prof. Dr. Arun P. Kulshreshtha,

Director General,

*Centre for Science & Technology of the Non-Aligned and other Developing Countries
(NAM S&T Centre),*

Core-6A, 2nd Floor, India Habitat Centre, Lodhi Road,

New Delhi – 110003, INDIA

Tel: +91-11-24645134, 24644974; Fax: +91-11-24644973

E-mail: namstcentre@gmail.com, namstct@bol.net.in, apknam@gmail.com

Website: <http://www.namstct.org>

Mr. M. Bandyopadhyay,

Senior Expert & Administrative Officer

Address, Tel. and E-mail: (O) as above.

NATIONAL BIOTECHNOLOGY DEVELOPMENT AGENCY (NABDA)

Dr. Bartholomew O. Ibeh,

Biochemist and Head of Medical Biotechnology Department,

National Biotechnology Development Agency,

Lugbe Abuja, FCT, Nigeria.

Mobile: +2348068767253

Email: barthokeyibeh@yahoo.com

**CENTRE FOR SCIENCE AND TECHNOLOGY OF THE
NON-ALIGNED AND OTHER DEVELOPING COUNTRIES
(NAM S&T CENTRE)**

**INTERNATIONAL WORKSHOP
ON**

‘MODERN AND EMERGING TREND IN VACCINE DEVELOPMENT’

Abuja, Nigeria

22-24 MAY 2018

NOMINATION FORM

Please affix your
scanned
photograph

*PLEASE TYPE OR USE BLOCK CAPITALS;
NO COLUMN SHOULD BE LEFT BLANK)*

SECTION –A

(To be filled in by the nominee)

- 1 Name (Prof/Dr/Mr/Mrs/Ms):
(As in Passport)

2. Father’s/Spouse Name:

- 3 Designation (Position held):

4. Nationality:

- 5 Date of Birth: Place of Birth (City) (Country).....

- 6 Passport No:Place of issue:
Date of Issue: Valid up to:
(Please attach copies of the relevant pages of your Passport)

- 7 Name of the Parent Institution (Employer):
Full Address (Office):
.....
Phone: Fax:
E-mail:

- 8 Full Address (Home):

 Phone: Mobile:
 Fax: E-mail:
- 9 Educational Qualifications: Highest Degree.
 Year of Award: University:
 Field of Study:
- 10 Brief Bio data (CV):
 (**Maximum two pages, in MSWord**; to be attached on separate sheet)
- 11 Abstract of your paper proposed to be presented in the Workshop.
 (**About 1-2 pages, in MSWord**; to be attached on separate sheet)
- 12 What in your opinion qualifies you for participation in this workshop?
 (To be attached on separate sheet)

Date: Signature:

SECTION -B

ENDORSEMENT BY NOMINATING AUTHORITY

(The Applicant in a member country of the NAM S&T Centre may get the following endorsement signed by the Focal Point of the Centre in his/her country, *if he/she wishes to take advantages accrued to the official nominee of the country*. For the list of member countries and names/addresses of the Focal Points please visit Centre's website www.namstct.org.)

Signature:
 Name (in full):
 Designation:
 Date:

SEAL

Enclosures:

1. Scanned copies of the relevant pages of Passport
2. Brief CV (maximum two pages, **in MSWord**)
3. Abstract of Paper proposed to be presented in the Workshop (about 1-2 pages, **in MSWord**)