



## West African Genetic Medicine Centre (WAGMC)

College of Health Sciences, University of Ghana

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**MEETING:** Short Courses Committee Team Meeting Minutes

**DATE:** Wednesday, 1<sup>st</sup> April 2020

**TIME:** 9.00am

**VENUE:** Teleconference Meeting

**CHAIRPERSON:** Kwamena Sagoe

**SECRETARY:** Jane Hutchison

**PRESENT (Group 1):** Kwaku Ohene-Frimpong

Kwamena Sagoe

Yvonne Dei-Adomakoh

### **AGENDA:**

**A BRIEF MEETING TO DISCUSS SHORT COURSES, THEIR RELEVANCE TO INDUSTRY PARTNERS AND SPONSORSHIP.**

### **DISCUSSION:**

- There was some level of uncertainty as to whether Roche pharmaceuticals have specific short courses they would want to sponsor or whether they are open to sponsor any short courses that WAGMC develops.
- The short courses committee needs to be well-informed about specific areas the industry players are most interested in so that such information could be factored in the development of short courses and in subsequent meetings.
- Yvonne will discuss with the Sub-Saharan head of Roche pharmaceuticals and Sanofi pharmaceuticals to know the way forward.
- Roche pharmaceuticals are into haematological malignancies and therefore was a major area to consider in the development of a short course.

- Create a short course on Therapies for Sickle Cell Diseases which Novartis Pharmaceuticals may be interested in sponsoring.
- Yvonne was asked whether she had identified any short courses that was tailored towards the training of people in the Ghana College of Physicians and Surgeons but she indicated Solomon and Lorna had a meeting with them, so would enquire about the outcome of those meetings.
- A certificate course in Genetic Counselling for Physicians was one of the suggested short courses.
- A program was launched by the Sickle Cell Foundation called Genetics Counsellor Trainee and Certification Program which trained nurses. It was suggested a higher-level course for Doctors could also be introduced.
- The Ghana College of Physicians curriculum for LAB MEDICINE INCLUDES haemoglobinopathies with some genetics- We could include genetic counselling in their curriculum not WAGMC curriculum. Genetic counselling can also be included in the curriculum for internal medicine and paediatrics. WAGMC will handle the genetic counselling part.
- Clinical Psychologist, Dr. Kofi Anie was one of the people mentioned who could teach some of the short courses.
- In conclusion, the specific short courses that were suggested were,
  - Haematological disorders
  - Therapies for sickle cell diseases.
  - Molecular biology for those in clinical practice.
  - Genetic counselling for different groups: i.e. paediatricians, internal medicine and laboratory medicine.

#### **ACTION ITEMS:**

- Discuss with local pharmaceutical companies to know those who will be interested in sponsoring short courses. -Yvonne
- Discuss with Novartis, Sanofi and Roche pharmaceuticals to know whether they have specific short courses they would want to sponsor or they are open to sponsor any short courses that we develop. -Yvonne
- Send a list of suggested individuals who will be interested in teaching short courses to Kwamena Sagoe - Kwaku Ohene Frimpong.
- Draft letter to local pharmaceutical companies to ask if they will be interested in sponsoring short courses - Melissa and Yvonne

#### **SIGNATORIES:**

Kwamena Sagoe (Chair)



Jane Hutchison (Secretary)





## West African Genetic Medicine Centre (WAGMC)

### College of Health Sciences, University of Ghana

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**MEETING:** Short Courses Committee Team Meeting Minutes

**DATE:** Thursday, 2<sup>nd</sup> April 2020

**TIME:** 9.00am

**VENUE:** Teleconference Meeting

**CHAIRPERSON:** Kwamena Sagoe

**SECRETARY:** Jane Hutchison

**PRESENT (Group 2):** Kwamena Sagoe  
William Kudzi  
Kwaku Ohene-Frimpong

#### **AGENDA:**

#### **1. INTRODUCTION**

##### **a) *Overview of the first meeting:***

- Kwamena Sagoe gave a recap of what was discussed in the meeting with group 1 with Prof Ohene-Frempong and Yvonne Adomakoh.
- The discussion was to ensure short courses were aligned to the Centre's objectives and are industry-relevant courses. The two suggested short courses by group 1 were
  - Areas in Therapies for Sickle Cell Diseases and Haematological Disorders
  - Genetic Counselling

##### **b) *A brief meeting to discuss possible short courses to be run by the Biomedical Group.***

- Kwamena's proposal was a course related to molecular biology that would help those in clinical practices .e.g. nurses, pharmacists and doctors have a basic foundation in molecular biology to relate to genetic issues.
- Kudzi explained that from past experiences, short courses have been open to all interested in the course of which majority were clinicians. The short course should provide a basic understanding and foundation for those in clinical practice and enable them to build on their career. He suggested we run a 2-week basic course;

- the first week providing the theoretical foundation, and the second providing hands on experience.
- The meeting agreed that there was a possibility of a follow-up course on sequencing for those who take the first course.

## 2. DISCUSSIONS

### a) *Overview of the two-week short course in Molecular Biology.*

- In week one, participants of the course can be taken through the fundamentals of Molecular Biology.
  - Before the start of the course, there should be some recapping of the basic things they already know from their first degree- this ensures that the group is exposed to the same information.
  - Participants will be expected to read an article with molecular as part of its methodology (an alternative is to provide it) and to indicate their comprehension before the course. They will also be expected to do same at the end of the course for a self-assessment.
- Week two can be devoted to practicals and hands-on training. Individuals will use their blood samples during the extraction process.
  - e.g. participants should have hands on training on pipetting, extraction of DNA, quantification of DNA, the PCR run, DNA Gel Electrophoresis etc. At the end of the two weeks, participants should be competent and motivated enough to carry on research in their clinical fields.

### b) *Areas of Sequencing and Noguchi's involvement.*

- It was agreed that the introduction of sequencing as part of the course will be an overload for course participants however there could be a short course for those interested as a follow-up to the first course.

### c) *Name of the Short Course*

- There was a consensus that the name of the course could be "*Molecular Biology for Clinical Practice*". However, this could later evolve.

### d) *Discussions to ensure there were no infringements on any protocols*

- There was a consensus that since the course was in Clinical Pharmacology, there was a need to involve Professor Neils Quarshie and the department in the processes towards the running of the course. Kwamena was supposed to contact Prof. Ofori Acquah to remind him about the request for a formal letter to Professor Neils Quarshie.

### e) *The training aspect of the course-William Kudzi*

- Details of this was to be shared in an email with Kwamena with Jane in copy; below is the proposed outline:

## **Week 1:**

### **A. Basic principles for Molecular Biology**

1. *What are DNA and RNA?*
2. *Principle of DNA extraction*
  - a. Breaking cells open to release the DNA
  - b. Separating DNA from proteins and other cellular debris
  - c. Precipitating the DNA with an alcohol/ Cleaning the DNA
  - d. Confirmation and quality of DNA
  - e. Determination of DNA concentration
  - f. The Usefulness of extracted DNA
  - g. Examples of DNA extraction methods
3. *Polymerase Chain Reaction (PCR)*
  - a. What is PCR?
  - b. Basic requirements for PCR
    - I. *DNA template*
    - II. *DNA polymerase*
    - III. *DNA primers (forward and reverse)*
    - IV. *Deoxynucleotide triphosphates (dNTPs)*
    - V. *A buffer solution*
  - c. Cycling conditions
    - I. *Denaturation*
    - II. *Annealing*
    - III. *Elongation*
  - d. Types of PCR
  - e. Uses of PCR Product
4. *Restriction Fragment Length Polymorphism (RFLP)*
5. *DNA Gel Electrophoresis*
6. *Applications of Molecular Biology Methods*

## **Week 2:**

### **B. Bench Work**

1. *Pipetting Skills*
2. *DNA extraction process*

3. *DNA Quantification with Spectrophotometer and Fluorometer*
4. *DNA Amplification (PCR) and Gel Electrophoresis*

### **C. Standard Operation Protocols (SOPs)**

1. *SOP for DNA extraction*
2. *SOP for DNA Quantification with Spectrophotometer*
3. *SOP for DNA Quantification with Fluorometer*
4. *DNA Amplification (PCR)*

#### **f) Maximum number of People for the Course**

- The number of people agreed by all was 15.

#### **g) Proposal for Internships in Short Courses**

- There were discussions whether the Centre could be seen supporting a short course internship focused for medical students in their clinical years (the courses will be specifically related to them) to help in their basic training to build up their capacity. It was suggested however that, students in their clinical years partaking in short course internships might prove difficult due to their course rotation structure. There is a Dean's biomedical research programme for 3<sup>rd</sup> and 4<sup>th</sup> year students that runs for 10 weeks, with students working under various supervisors partaking in research. The programme aims to expose students to research.

#### **ACTION PLAN**

- Solomon to send an official letter to Prof. Neils as previously requested -Kwamena
- Discuss with Solomon if he wants to expand the 10 weeks research programme, so students in other clinical disciplines e.g. Pharmacy could be engaged during their summer break e.g. a summer attachment to a lab for students to get hands-on experience and build on their molecular biology knowledge - Kwamena

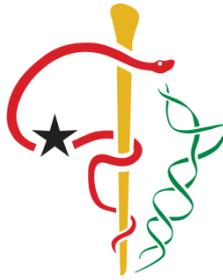
#### **SIGNATORIES:**

Kwamena Sagoe (Chair)



Jane Hutchison (Secretary)





## West African Genetic Medicine Centre (WAGMC)

College of Health Sciences, University of Ghana

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**MEETING:** Short Courses Committee Team Meeting Minutes

**DATE:** Friday, 3<sup>rd</sup> April 2020

**TIME:** 10.00am

**VENUE:** Teleconference Meeting

**CHAIRPERSON:** Kwamena Sagoe

**SECRETARY:** Jane Hutchison

**PRESENT (Group 3):** Kwaku Ohene-Frimpong

Kwamena Sagoe

Judith Osae-Larbi

Annabella Osei-Tutu

Kofi Anie

### AGENDA:

a) ***Overview of the first meeting:***

- The first meeting had three participants in attendance namely Yvonne, Kwaku Ohene Frempong, and Kwamena.
- The idea was having courses that were not only aligned to the vision of the centre but also industry-relevant courses. The suggested course was Genetic Counselling for paediatrics, internal medicine and laboratory medicine under different groups.

b) ***A brief meeting to discuss the specific short courses***

### DISCUSSIONS

- Annabella suggested that the field of genetic counselling is too broad to have as a short course, so specific topics within Genetic counselling could be selected and offered as modules instead.
- There could be different modules for Genetic counselling so that people can take a module they feel is relevant to them however those who want a certificate might have to take about 5 to 6 modules.
- It was also imperative that non-professionals in the health environment benefited from the short courses (modules). e.g. pastors and lay counsellors.

- The consensus reached was that there should be specific short courses targeted within specific specialties. For example, courses that target specific health care professionals; specific diseases (such as sickle cell disease) or clinical areas and courses that target specific groups in terms of people from the community like the lay counsellors. Courses should include components of the principles of basic genetics and communication skills.
- Kofi suggested that for specific courses that target specific diseases we should have a variety of professionals/disciplines taking part in the short courses.
- Based on suggestions received concerning the courses and modules which can be run, a consensus was reached concerning the development of an outline. This outline will consider target/specific groups, specific diseases, how the modules can be organized such that people can be given a post graduate diploma or certificate and how this may link to the diploma course being designed. This should be done before the meeting for the entire short courses committee so all could have a fair idea of the short courses that could be run. Members agreed to a one week period for submission of a report.
- Two things that were to be considered in the development of short courses were to know the number of people to enroll and the facilities required. Noguchi and Yiri lodge came up as facilities that could be considered.
- The suggested number of students to enroll for each of the short courses was between 12 to 16.

#### **ACTION PLAN**

- Develop the outline based on the suggestions made on the courses and modules-Kofi
- The WAGMC postgraduate diploma to be shared with Dr. Anie- Judith

#### **SIGNATORIES:**

Kwamena Sagoe (Chair)



Jane Hutchison (Secretary)



**MEETING:** Short Courses Committee Team Meeting Minutes

**DATE:** Wednesday, 20<sup>th</sup> May 2020

**TIME:** 1.00pm

**VENUE:** Teleconference Meeting

**PRESENT:**

Lorna Renner – Deputy Director (Chair)

Jane Hutchison – Communication and Marketing Officer (Secretary)

William Kudzi – Monitoring and Evaluation Officer

Kwamena Sagoe – Lead Coordinator for Short Courses

Yvonne Adomakoh- Sectorial Liaison Officer

Judith Osae-Larbi- Research Fellow

**ABSENT:**

Kofi Anie (absent with apology)- Community Engagement Core Lead SickleGenAfrica

Annabella Opere-Henaku- Education and Training Coordinator

Kwaku Ohene-Frimpong- Chair, WAGMC Sectoral Advisory Board (SAB)

**1. AGENDA**

**a) Introductions**

- Members of the committee introduced themselves and stated their various roles at the Centre.

**b) A brief overview of the purpose of the meeting**

- The purpose of the meeting was to touch base with the progress of the WAGMC short courses and developments that have taken place to date.

**2. RECAP FROM THE LAST SHORT COURSES COMMITTEE MEETING.**

- Kwamena Sagoe gave a recap of the group discussions held in the last meeting:
  - Sectorial team were to identify which direction to go based on the interest of the pharmaceutical companies working with WAGMC.
  - The biomedical team agreed to run a two-week short course on molecular biology which will entail a one -week theoretical aspect and a one-week practical aspect.
  - The behavioural team agreed on a modular system for the short course to cater for specific needs of specific groups. With the modular system, individuals can add up modules to get a certificate at the end of the course.
  - According to the world bank requirements, the minimum duration of the short courses was 2 weeks or 40 hours.

### 3. DISCUSSIONS

- The behavioural team presented a guideline on how to develop their modules, however, Dr. Anie would be required to elaborate on the guidelines presented.
- The short courses were also an avenue to get people interested in the post graduate programs.
- Discussions and partnerships with Sanofi and Roche pharmaceutical companies were on-going. Sectorial team is currently awaiting feedback from Sanofi to decide which areas to develop short courses in.
  - The diagnostic arm of Roche will focus on sponsoring short courses in molecular haematology focusing on non-Hodgkins lymphoma and will involve hands on in immunohistochemistry in partnership with the pathology department. The pharmaceutical arm will focus on short courses on targeted therapy in cancers partnering with the radiation oncology department.
- A consensus was reached that it would be necessary to develop a course outline/structure for individual short courses and approach companies with similar interests in that area to partner with.
- With the universities currently closed due to the ongoing pandemic, the mode of teaching required that courses developed be taught online via zoom and the practical aspect of courses be put on hold until further notice.
- CPD Credits/Accreditation for short courses: The centre will work in collaboration with accreditation bodies such as the medical and dental council for accreditation of short courses.
- It was agreed that Kwamena was going to work closely with Yvonne to suggest aspects of the course outline which might be important for those who were going to take the course.
- The Behavioural group should discuss among themselves to have an idea of what the content of the modules will be and the order in which they would be presented. .
- A meeting will be held to discuss the details of the modules before reporting to the committee.

### 4. ACTION ITEMS

1. Submit course outline within two weeks to Kwamena - Sectorial, Behavioural and Biomedical Group.
2. Define duration of course delivery and the mode of teaching e.g. online teaching - Sectorial, Behavioural and Biomedical Group
3. Draft a course outline and share outcome of discussions held with pharmaceutical companies with William for his input. - Yvonne
4. The centre should compile a list of names of faculty to assist group members to come up with course outlines and possible faculty facilitators.

#### Signatories



Lorna Renner (Chair)



Jane Otto-Hutchison (Secretary)