

## Kwame Nkrumah University of Science and Technology

# VICE-CHANCELLOR'S REPORT

53rd Congregration July, 2019

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**Professor Kwasi Obiri-Danso** Vice-Chancellor

## PRINCIPAL OFFICERS OF THE UNIVERSITY

## Chancellor

Otumfuo Osei Tutu II, Asantehene

## Vice-Chancellor

Professor Kwasi Obiri-Danso

## **Other Officers**

## **Pro Vice-Chancellor**

Prof. (Mrs.) Rita Akosua Dickson

## Registrar

Mr. Andrew Kwasi Boateng

## ADMINISTRATION OF THE UNIVERSITY

#### VICE-CHANCELLOR Professor Kwasi Obiri-Danso

BSc MPhil Kumasi PhD Lancaster

#### PRO VICE-CHANCELLOR Professor (Mrs.) Rita Akosua Dickson

BPharm MPharm Kumasi PhD GCAP London MPSGH MCPA FGHCPh

#### REGISTRAR Mr. Andrews Kwasi Boateng

Dip. Ed. BA MPhil Cape Coast CEMBA, Kumasi

#### FINANCE OFFICER Mr. Yaw Nimo-Baffour

ICA Ghana EMBA (Finance) Ghana

#### LIBRARIAN Dr. Samuel Kotei Nikoi

BLS Lough. MA Ghana PhD Lough. PGCTHE UK

#### DIRECTOR OF WORKS & PHYSICAL DEVELOPMENT Dr. Arc. Jimmy Nkrumah

BSc Pg Dip Kumasi MSc PhD (UNEM) AGIA DTMSI

#### INTERNAL AUDITOR Mr. Daniel Bart-Plange

ICA Ghana, MBA (Finance) Kumasi

#### DIRECTOR, UNIVERSITY HEALTH SERVICES Dr. Osei Kwaku Wusu-Ansah

BSc MB ChB Kumasi FWACS

## **PROVOSTS OF COLLEGES**

#### AGRICULTURE AND NATURAL RESOURCES Professor Steve Amisah

BSc Dip. Ed. (Cape Coast) MPhil Kumasi MSc Buckingham PhD Hull

#### ART AND BUILT ENVIRONMENT Professor Joshua Ayarkwa

BSc MPhil Kumasi, PhD Japan FGIOC MGhIS MGIF ICIOB MACI

#### ENGINEERING Professor Mark Adom-Asamoah

BSc Kumasi MSc DIC London, PhD, Bristol FGhIE

#### HEALTH SCIENCES Professor Yaw Adu-Sarkodie

BSc Kumasi BMedSci Sheffield MBChB Kumasi MSc PhD London

#### COLLEGE OF HUMANITIES AND SOCIAL SCIENCES Professor Imoro Braimah

BSc MSc Kumasi PhD Kassel-Germany

#### COLLEGE OF SCIENCE Professor Ibok Nsa Oduro

BSc MSc Ibadan PhD Cranfield

#### DIRECTOR, INSTITUTE OF DISTANCE LEARNING Professor Kwame Osei Boateng

BSc Kumasi ME DE Japan

## COLLEGE OF AGRICULTURE AND NATURAL RESOURCES

ASANTE-KWATIA LECTURE THEATRE



## COLLEGE OF AGRICULTURE AND NATURAL RESOURCES

#### INTRODUCTION

The College of Agriculture and Natural Resources (CANR) like the other 5 Colleges, was established in accordance of Statute 33 and Schedule C1 of the 2004 University Statute as amended. The College has been described as the Best Educational Institute in Agriculture and Natural Resources Management and received the Le Matinal Educational Excellence Award under the Africa India Partnership initiative. It remains one of the most active and vibrant of the six Colleges in research and outreach at KNUST. The College's core mandate is to promote agricultural production, rural development and management of renewable natural resources across Ghana and globally through teaching, research, and outreach. In this process, the College engages in managing people while training high calibre manpower with the requisite entrepreneurial skills necessary for public and private enterprise development within the confines of its mandate.

#### FACULTIES AND RESEARCH CENTRES

The College comprises two Faculties and three Research Centres. It may be recalled that during the 2017/2018 academic year the College had three faculties. One of these faculties, Faculty of Forest Resources Technology was for administrative expediency renamed Department of Forest Resources Technology. This leaves the two main faculties as Faculty of Agriculture and the Faculty of Renewable Natural Resources (FRNR). The research centres are Bureau of Integrated Rural Development (BIRD), KNUST Dairy/Beef Cattle Research Station, and Agricultural Research Station, Anwomaso.

Several Departments in the College are in the process of rebranding their programmes to make them more attractive and enhance retention of students.

#### ACADEMIC PROGRAMMES

Academic programmes in the College are hosted by the two faculties and nine Departments. The Research centres provide research, teaching and outreach. Both the Faculty of Agriculture and Faculty of Renewable Natural Resources run composite and non-composite BSc programmes. In the composite programmes students have the opportunity to specialize in options at the third and fourth years of their study. The non-composite programmes are those that students pursue from the first year to the final year. Listed here are the programmes and the options offered by the faculties.

Undergraduate Programmes in Faculty of Agriculture

BSc. Agriculture

Options

- Animal Science,
- Horticulture,
- Agricultural Economics
- Agricultural Extension & Rural Sociology
- Crop Science
- Soil science

BSc. Agricultural Biotechnology

BSc. Landscape Design and Management

BSc. Agri-Business Management

Fresh admissions to the under-listed two programmes have been put on hold by KNUST pending rebranding: The programmes are:

- BSc. (Postharvest Technology)
- BSc. (Dairy and Meat Science)

Undergraduate Programmes in the Faculty of Renewable Natural Resources

BSc. Natural Resources Management

Options

- Agroforestry
- Fisheries & Watershed Management
- Silviculture & Forest Management
- Wildlife & Range Management

BSc. (Aquaculture and Water Resources Management)

BSc. Forest Resources Technology

Options

- Social Forestry
- Land Reclamation & Rehabilitation
- Ecotourism & Forest Recreation
- Wood Processing & Marketing

#### Postgraduate programmes

All the faculties in the College offer postgraduate programmes as follows:

2-year M Sc. programmes composed of taught courses and supervised research

2-year MPhil programmes by research only, and

4-year PhD programmes with prescribed taught courses in year one.

## **COLLEGE ADMINISTRATION**

The Administrative Head of the College is the Provost who is responsible for the overall administration, academic development and financial management of the College. The Faculties are headed by Deans who have oversight responsibilities on the academic and research activities of the departments in their Faculty. The Provost is supported by a Registrar, a Deputy Finance Officer, a Librarian, and a Secretary. The Secretariat and Provost office is currently located on the third Floor of the New Classroom Block.

The College Board, regulates all matters relating to the organization of education, teaching, research and study of the courses run in the departments of the College. The Chairman of the Board is the Provost. The Office of the Provost coordinates teaching, research, income generation, students' welfare and all other matters, which have been extensively reported by the Faculties,

Academic Departments and Research Units. The College Administration is constituted by the following personnel:

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Prof. Steve Amisah, PhD	Provost
Owusu Ansah Debrah, Esq	College Registrar
Mr. Johnson Owusu	College Finance Officer
Mr Kwabena Ofori Asiamah	College Librarian
Ms. Vida Boateng	Principal Administrative Assistant

#### STAFF AND STUDENTS STATISTICS

The grand total of all students in the College in the year under review stands at 3,332.

The total registered undergraduate students at the CANR were 3,144 and distributed as follows:

Faculty of Agriculture	1,406
Faculty of Renewable Natural Resources	1,738

The number of postgraduate students stands approximately at 188 with 102 coming from the Faculty of Agriculture and 86 from the Faculty of Renewable Natural Resources. There is a need to embark on a more aggressive drive to recruit more in the ensuing years.

In 2018/2019 academic year, the total number of staff on payroll at the College is 276 and this is made up of 123 Senior Members, 78 Senior Staff and 69 Junior Staff representing very marginal increases in Senior members and Senior staff numbers.

#### **RESEARCH COLLABORATIONS**

The CANR continues to support the collaborations that the faculties, departments and the centres have signed with various institutions in and outside the confines of the University. The College is making considerable efforts to support the "One Village One factory" initiative by the President of the Republic of Ghana. To this end, CANR with support from mainstream university administration has established of a fruit processing factory at Mantukwa in the Bono Region. The factory is now fully operational and has obtained the certification from the Food and Drugs Board. This initiative is a ripple effect of the outcomes of the APERL project which was executed by the Department of Agroforestry in collaboration with CIDA and the University of Guelph, Canada.

#### **Research frontiers**

The CANR is known for its innovation and skill in research and prolific scientific publications, and grant winning proposals. At least 17 major research grants were in the College system during the 2018/2019 academic year. Three more had been added at the time of writing this report and this should put the faculty in a comfortable lead in the league of research giants at KNUST and possibly in the country at large.

The various Departments in the Faculty of Renewable Natural Resources are making considerable efforts for additional research grants. The Department of Silviculture and Forest Management continues to pursue an aggressive collaborative research with UK Space Agency and to establish a Ghanaian Remote Sensing site for atmospheric carbon columns towards developing a Pan-African carbon network. The project seeks to establish a sustainable ground-based carbon remote

sensing site at KNUST that produces high quality  $CO_2$  and  $CH_4$  columns. It also seeks to develop new local measurement and modelling capabilities associated with atmospheric  $CO_2$  and  $CH_4$ .

The Faculty of Agriculture continues to benefit from various grants that include the Royal Society-DFID Programme grant of £1,132,162.00 for capacity building in Soil Science in collaboration with Imperial College London, INERA-Burkina Faso and FUNAAB-Nigeria. The Faculty also has a research grant of (£18,640 from The Royal Society SABMiller Exchange Programme in Soil Science in collaboration with Imperial College London and University of Aberdeen, Scotland. The AGRA project, domiciled in the College, is gradually winding up after providing so much support to graduate students at Masters and PhD levels while building research capacity among students.

The Animal Science Department of the Faculty of Agriculture continues to blaze the trail through expansion and intensification of poultry and meat production and injecting more capital into its production. Apart from selling products at the farm gate, there is a dedicated shop at the Commercial area on campus where meat, eggs and sausages can be purchased under very hygienic conditions of preparation and delivery.

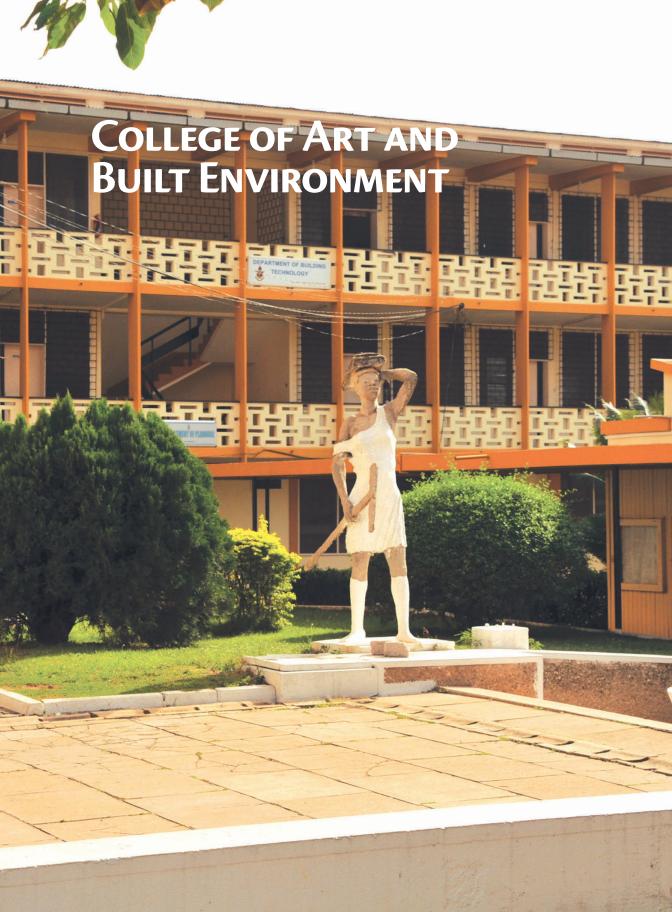
Bureau of Integrated Research and Development (BIRD) was engaged by the International Cocoa Initiative to undertake an external evaluation of its Community Development Programme, carried out in 75 communities in Ghana and Cote d'Ivoire. Core staff are Professor Paul Sarfo-Mensah, Dr. Albert Arhin, Dr. (Mrs.) Ernestina Fredua Antoh and Mr. Kwaku Obeng Okrah.

BIRD, in collaboration with the University of Liverpool, undertook a study on the changing labour conditions, modern slavery and child labour on the cocoa corridors of Ghana. Core staff were Dr. Albert Arhin and Dr. (Mrs.) Ernestina Antoh.

The National Insurance Commission has also contracted BIRD to prepare a policy and legislative framework for the provision of agricultural insurance in Ghana. Core staff are Nana (Dr. Edusah), Dr. Albert Arhin and Dr. (Mrs.) Monica Addison and Prof. Paul Sarfo-Mensah.

Faculty members in the College continue to research in their fields of specialization. Research conducted by staff and their collaborators in the year under review yielded 173 journal articles, some conference papers, book chapters and technical reports. Details of these can be found in the Quality Assurance Bulletin of the University for the year under review.

Over the past academic year there have been many promotions from Lecturer to Senior Lecturer categories. The College is also pleased to state that there have been at least 4 promotions from Senior Lecturer grades to Associate Professor. The College continues to retain several brilliant Associate Professors and Professors at the post retirement level and these serve as a formidable mentorship and a great asset to the College. It is anticipated that the ensuing years would bring in more promotions at the professorial level to further enhance the image of the College. Our graduates are blazing the trail in both academia and industry as we equip them with desirable entrepreneurial skills for sustainable development of the country.



## COLLEGE OF ART AND BUILT ENVIRONMENT

#### INTRODUCTION

The College of Art and Built Environment emerged in 2014, following the restructuring of the collegiate system of the University. The College's vision is to become a centre of excellence for Art and Built Environment Education in Africa. Its mission is to advance knowledge in Art, Design and Built Environment through creation of an environment for undertaking relevant research, quality teaching, entrepreneurship training and community engagement to improve the quality of life. The College is structured in a three-tier system under the leadership of the Provost.

#### FACULTIES, DEPARTMENTS AND PROGRAMMES

The College of Art and Built Environment currently comprises three Faculties (Faculty of Built Environment, Faculty of Art and the Faculty of Educational Studies) with nine (9) Teaching Departments and one (1) Research Centre as follows:

#### Faculty of Art

- Department of Communication Design
- Department of Industrial Art
- Department of Painting and Sculpture
- Department of Publishing Studies
- Department of Educational Innovations in Science and Technology

#### **Faculty of Built Environment**

- Department of Architecture
- Department of Construction Technology and Management
- Department of Planning
- Department of Land Economy
- Centre for Settlement Studies

#### **Faculty of Educational Studies**

Faculty of Educational Studies is a newly established faculty mandated to oversee five (5) public Colleges of Education in Ghana.

#### ADMINISTRATION OF THE COLLEGE

The College is administered by the following Officers:

Professor Joshua Ayarkwa	Provost
Mr. Henry Harry Akosah	College Registrar
Mrs. Catherine Acquah	Ag. College Finance Officer
Mr. David Vincent Kweku Arkoful	Ag. College Librarian

#### FACULTY OF BUILT ENVIRONMENT

Prof. John Tia Bugri	Dean
Miss Senita Osei Badu	Faculty Officer

#### FACULTY OF ART

Dr. Karikacha Seidu	Dean
Ms. Susana Asamoah	Faculty Officer

#### FACULTY OF EDUCATIONAL STUDIES

Dr. Wintson Aborampah Dean

Dr. Paul Kwadwo Addo	Faculty Officer
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#### **PROGRAMMES OFFERED**

Departments in the College offer both undergraduate and postgraduate programmes in academic disciplines presented as follows:

Department	Undergraduate programme	Postgraduate programme
Communication Design	BA Communication Design	MComm. Design MPhil Comm. Design
Educational Innovations in Science and Technology	B.Ed Junior High School Specialism ( To commence 2019/2020 Academic Year)	MED MPhil Art Education MSc African Art and Culture MPhil African Art and Culture MSc/MPhil Educational Innovation and Leadership Science PhD Art Education PhD African Art and Culture MSc/MPhil Creative Art Therapy (To commence 2019/2020 Academic Year)
Industrial Art	BA Industrial Art BSc Ceramic Design and Technology BSc Fashion Design BA Metalsmithing and Jewellery Technology BSc Textiles Design and Technology BA Integrated Rural Art and Industry	MFA Metals MFA Ceramics MFA Textiles MPhil Integrated Art and Industry MPhil Textiles and Fashion Design Technology (To commence 2019/2020 Academic Year) PhD Textiles and Fashion Design Technology (To commence 2019/2020 Academic Year)

Painting and Sculpture	BFA Painting	MFA Painting
Scupture	BFA Sculpture	MFA Sculpture
	<b>BFA Painting &amp; Sculpture</b>	MFA Painting and Sculpture
		PhD Sculpture
		PhD Painting
		PhD Painting and Sculpture
Publishing Studies	BA Publishing Studies	MA Publishing Studies
Architecture	BSc Architecture	M Arch
		MSc Architecture
		PhD Architecture
		MPhil Architectural Studies
Construction	BSc Construction	MSc/MPhil Construction Management
Technology and Management	Technology and Management	PhD Construction Management
Management	BSc Quantity Surveying &	MPhil Building Technology
	Construction Economics	PhD Building Technology
	construction Economics	MSc/MPhil Project Management
		PhD Project Management
		MSc/MPhil Procurement Management
		PhD Procurement Management
Planning	BSc Human Settlement	MSc Dev. Planning and Management.
_	Planning	MSc Dev. Policy and Planning
	BSc Development Planning	MPhil Planning
		MSc Transportation Planning
		MPhil Development Studies
		MPhil Urban Management Studies
		PhD Development Studies
		PhD Planning
Land Economy	BSc Land Economy	MSc Facilities Management
,	BSc Real Estate	MSc Land Governance and Policy
		PhD Land Management
		The Land Management

## STAFF AND STUDENTS STATISTICS

The College has a student population of seven thousand and six (7,006) with 164 teaching and research staff and 124 support staff. The number of students for each Faculty is as follows:

Faculty of Art

3110

Faculty of Built Environment – 3896

#### ACTIVITIES

During the 2018/2019 academic year, the College undertook a number of activities, some of which are detailed below:

#### INTRODUCTION OF NEW PROGRAMMES

The College Board considered and approved the under-listed new demand driven programmes. The programmes have been submitted to the Graduate School Board for consideration.

- 1. PhD Textile and Fashion Design Technology
- 2. MPhil Textile Design Technology
- 3. MPhil Fashion Design Technology
- 4. MSc/MPhil Planning Monitoring and Evaluation (IDL)
- 5. MSc/MPhil Creative Art Therapy
- 6. MLA Landscape Architecture
- 7. MPhil Disaster Prevention and Management (in Conjunction with the Department of Civil Engineering)
- 8. PhD Disaster Prevention and Management (in Conjunction with the Department of Civil Engineering)
- 9. PhD Visual Communication Design

#### INFRASTRUCTURAL DEVELOPMENT/VEHICLE

The following activities have been carried out in the College:

- Work on the College's six-storey building complex is progressing steadily. It is hoped that when completed, it will provide enough space for teaching and offices for staff.
- Renovation of the Centre of Excellence for Housing Studies Block;
- Renovation of College Conference Room;
- Commissioning of E-Library facility at the Faculty of Art.
- The Faculty of Art embarked on the first phase of a facelift project for its Old Site which was built in 1951 at the inception of the University. Among the facelift projects are:
- i. Painting of all studios, classrooms, offices and facilities to harmonize with the University's on-going beautification.
- ii. Rehabilitation of all washroom facilities and installation of 17 new sets of water closets and repair of 8 more sets of water closets. Also, there has been construction of new washroom facility at Design Press.
- iii. Restoration of all water storage and supply systems at the Old Site.
- iv. Construction of two studio spaces for Metal Products and Jewellery Section and renovation of the forging studio.

- v. Landscaping of Design Press and Protestant Chapel boundary.
- The Faculty of Art's New Site saw some fresh developments, some of which are on-going. These included the following:
- i. The final agreement leading to the construction of the Faculty's second 4-storey classroom and office complex was signed between KNUST and the China State Construction Engineering Co-operation. The project is funded by GET Fund.
- ii. Landscaping of the New Site is on-going.
- iii. A 24-seater garden canopy and seating facility for students' internet browsing has been installed and in use.
- The Department of Communication Design, led by Dr. Eric Eshun, negotiated the signing of memorandum of understanding (MOU) between the KNUST and Media 7 (a satellite platform provider). The MOU is to facilitate the live transmission and broadcast of the Faculty's flagship project, TEK TV, on a free-to-air platform. The test transmission is expected in June, 2019.
- The Department of Industrial Art staged a spectacular Fashion Show at the KNUST Mall on 3<sup>rd</sup> May 2019. The show, partly sponsored by GTP, attracted a large audience from the University community and from the hearts of Kumasi city.
- The Faculty of Art contributed immensely to the on-going beautification of the University through murals designed and painted by Dr. Bernard Akoi-Jackson and a team of students and teaching assistants. Among the murals are:
  - i. KNUST: The Myth, the Lore, the Legend" at the A.S.Y. Andoh wing of the main Administration building.
- ii "Of Affinity and Kinship" at the Trevallion Building, Department of Architecture, College of Art and Built Environment, KNUST.
- iii. "A Healthy Splash" at the newly built GUSS Sports Complex, KNUST, as part of commissions commemorating 20 years of the Asantehene, Otumfour Osei Tutu II's ascension to the Golden Stool.
- iv. "DenkyemKye" at the Manhyia Palace
- The Faculty collaborated with Dr. Agyeman Ossei of Openemma Productions to stage adaptations of Ghanaian writer Ayi Kwei Armah's novels "Osiris Rising" and "Healers" in the Great Hall auditorium, KNUST. The projects were funded by the Office of the Vice Chancellor.
- A new Land Cruiser Prado has been procured for use by the Provost of the College;

#### WORKSHOP/PUBLIC LECTURE

- The College organised its first Public Lecture on the theme, 'Ghana Beyond Aid; The Role of Infrastructure Development'. This Public Lecture was well attended by people from both industry and academia;
- A workshop was organised for all secretaries in the College on 8<sup>th</sup> March, 2019. The workshop was on the theme 'Effective Business Communication'.

- To introduce selected stakeholders at KNUST to appreciate the new Teacher Education Reform and B.Ed. curriculum and their roles in the implementation, the Faculty of Educational Studies organised a workshop was held on April 3, 2019.
- To introduce partner schools to the new Teacher Education Reform, the B.Ed. curriculum and their roles in the implementation of the Supported Teaching in Schools component, workshops were held for Tutors of the KNUST Basic School. Phase 1: April 24-25th, 2019 Phase 2: May 2-3rd, 2019.
- Staff of the Faculty of Educational Studies participated in Gender and Inclusion Summit organised by the National Council for Tertiary Education with support from T-TEL. May 7-8, 2019. Mensvic Hotel. East Legon, Accra.

#### **GRANT AND AWARDS**

- Professor Leni Hoffmann, donated five (5) books for painting/graphic Arts Staatiche Akademie, Germany.
- Dr. Ransford A. Acheampong, a past student of the Department of Planning, also donated three (3) copies of a book to the College library and the University.
- The College also received 300 bags of cement from CIMAF Cement Ghana Limited.
- The College and the University as part of an exchange agreement between the Department of Publishing Studies and EPP Books Services received the following donations from the CEO of EPP Books Services:
  - i. 5000 dictionaries to support the Chancellor, Otumfuo Osei Tutu II Education Fund.
  - ii. Vice-Chancellor's Prize and endowment fund for the overall best student of the University and overall best student of Publishing Studies.
- iii. 10 LCD projectors and 10 projector screens to the University.
- iv. GHC 50,000 worth of textbooks to the University.
- v. A cheque of GHC 10,000 to the Department of Publishing Studies.
- vi. A scholarship of GHC 8,000 annually to two students of Department of Publishing Studies and reserved job vacancy for them in EPP Books Services.
- Prof. El Anatsui (D. Litt. Honoris Causa, KNUST, 2017), the world-renowned artist, is paying \$100,000 to the KNUST Library for the acquisition of books. The signing of agreement between supplier and KNUST is in its final stage.
- Dr. Eric Appau-Asante of the Department of Educational Innovations in Science and Technology received donation of assorted textbooks with market value of over \$4,000. Sponsorship was obtained from the Arts Council of the African Studies Association (ACASA) and Saint Louis Art Museum, U.S.A.
- Ibrahim Mahama (Artist and PhD student Painting and Sculpture) and world-renowned artist made the following donations and contributions:
  - i. Donated an Inspire 1 Professional Drone to the Faculty of Art.

- ii. Funded a large format LED monitor which screened the videos on the Chancellor Otumfuo Osei Tutu II's twenty-year reign on the Golden Stool during the week-long celebration by KNUST.
- Prof. Jeannie Hulen, Associate Dean of the School of Fine Arts, Arkansas University and a Fulbright Scholar attached to the KNUST Ceramics Section, donated glaze materials and stains to the Section. She also established an international exchange between KNUST and Arkansas. Two senior staff of KNUST Ceramics Section gained admission and full scholarship award to pursue a three-year MFA degree in Arkansas.
- Kwasi Ohene-Ayeh (PhD student Painting and Sculpture) was awarded the KfW Stiftung/ DAAD Grant. Themed "Curators in Residence: Curating Connections, 2018/2019", the award covers the following:
- i. Cash prize of €13,000.
- ii. 6-month residency in Berlin.
- Eric Gyamfi (MFA Student, Painting and Sculpture) received the 13th Foam Paul Huf Award (2019), a prestigious prize in Photography. The Award covers the following:
- i. Cash prize of €20,000.
- ii. A solo show at Foam premises in Amsterdam.
- iii. A spot in Foam Magazine's Talent Issue.
- iv. A travelling exhibition.

Among the previous winners are Pieter Hugo and Michael Subotzky of South Africa who are professional artists of world-renown.

- Kelvin Haizel (PhD student Painting and Sculpture) won the 2018 Vontobel Contemporary Photography Prize. The Award covers the following:
- i. Cash prize of €20,000.
- ii. A sponsored solo exhibition of his project "Babysitting a Shark in a Coldroom Comoros Encounters" at Vontobel, Zurich.
- iii. A sponsored exhibition catalogue designed by Teo Schifferli, an award winning Swiss graphic designer.
- Henry Obeng [BFA Painting] won the Merit Award of the ABSA L'Atelier Art Prize (2018) in Johannesburg, South Africa. The ABSA L'Atelier Art Prize is South Africa's most prestigious art competition. Henry Obeng's prize covers a two-month artist's residency on the island of Sylt, northern Germany, with a gratifying weekly stipend

#### FUNDING OF RESEARCH ACTIVITIES

 Members of the Faculty of Built Environment have been successful in attracting funding for research projects with research grants of sixty thousand euros and ten thousand US Dollars from the Network of Excellence on Land Governance in Africa (NELGA) and the University of Cape Town. • The Centre for Settlement Studies won a research grant of US\$10,000.00 from the University of Cape Town under the Project, Fostering Comparative Research Agenda in African Cities – Urban Spatial Inequality and the New Urban Agenda (With support from Ford Foundation). The project has come to a successful end and as part of dissemination strategies a manuscript, titled 'Weathering the Storm: Reflections from Community Based Flood Research in Ghana'. The book chapter is to be published in a book chapter by the University of Cape Town.

#### The following KReF grants have been won:

- The Centre for Settlement Studies won a KReF grant of GH¢9,897.00 to undertake research in assessing the impact of occupant behaviour on energy consumption in public institution buildings.
- Dr. Owusu Amponsah of the Department of Planning won a KReF grant of GH¢29,964.00 to undertake research project in Ghana's biofuel investment policy: An inducer or barrier to sustainable livelihoods in poverty stricken rural communities.
- Dr. Stephen Appiah Takyi of the Department of Planning won a KReF grant of GH¢29,300.00 to undertake research project in Urbanizing with Nature: An assessment of the effects of human activities on water bodies in the Kumasi metropolis.
- Dr. Emmanuel Adinyira of the Department of Construction Technology and Management won a KReF grant of GH¢10,000.00 to undertake research project in Systems modelling of risks to international construction joint ventures (ICJVs) in Ghana.

#### VISITS

- The Dean of Contemporary Arts of the Ramapo College of New Jersey, Dr Peter Campbell visited the Faculty in March 2019. Dr Peter Campbell is consulting with the Faculty on a proposed introduction of Contemporary Theater, Film, and Music programmes.
- The College received Fulbright Visiting Professor and Two researchers; Professor Lain Jackson and Dr. Lukasz Stanek from the University of Liverpool and University of Manchester respectively.
- The Faculty of Art served as a reference point where students from senior high schools all over Ghana came to visit to update their education in art and culture.

#### **COLLABORATIONS**

- The Faculty of Built Environment continues to enjoy sponsorship from a number of funding agencies including the GREDA and Office of the Administrator of Stool Land (OASL).
- The Department of Land Economy has also developed a proposal to organise a stakeholders' conference on housing finance in collaboration with the Ministry of Works and Housing and the Ministry of Finance.
- The Department of Land Economy again responded to a call for proposal to serve as a host institution for the German Academic Exchange Service (DAAD) Scholarship receipients and has been selected as one of six host institutions.
- The Land Economy Department also continues to be in close relationship with the Industry. Broll Ghana, TDC, GHL Bank, Republic Bank, Ghana Ports and Harbors, TOR, GNPC and the Lands Commission.
- In the year under review, the Department of Planning in collaboration with the Ghana Institute of Planners organized the 47<sup>th</sup> Annual General Conference on the theme: Planned

Cities: A key Factor in Effective Sanitation Service Delivery from November 30 to December 1, 2018. The Conference which took place in KNUST witnessed the highest number of participants ever.

- The Department of Planning began the implementation of the Memorandum of Understanding signed with GIZ as part of the Support for Decentralisation Programme. Consequently, 2 academic staff of the Department, a representation of the National Development Planning Commission and the Regional Economic Planning Officers of the former 10 Regions of Ghana undertook a study tour to North Rhine-Westphalia, Germany to share experience in local revenue mobilisation, urban development and municipal finance. Experts from the Ghana Institute of Planners (GIP) continue to provide inputs to the Department of Planning into the new programmes planned for the coming academic year.
- The Department of Communication Design collaborated with the British Council to organize the Jobs for the youth programme. The Jobs for Youth – Migration and Employment Promotion is a GIZ and British Council project designed to provide the youth with holistic learning and development opportunities to create jobs for themselves and others. Between January and March 2019, 1200 people received a 5-day training that covered Entrepreneurial Mind-set, Product Design, Starting a business, financial Management.
- The Department of Architecture also continues to partner the Frankfurt University of Applied Sciences, Technical University of Munich. The Department has also held high level meetings with representatives from Ghacem on a GHC700,000 project, termed Ghacem Mobile Academy. The focus of this collaboration is to train artisans and students to improve on the application of knowledge on Ghacem products.
- T-TEL signed MoU with KNUST and provided GHC 500,000.00 to support the implementation of the new B.Ed. Curriculum on the 2<sup>nd</sup> April, 2019.
- KNUST and 5 CoE had a meeting on Partnership Agreement. The purpose was to discuss with the CoE how the partnership will work for both parties. All the Principals from Wesley CoE, Kumasi; E. P. CoE, Bimbilla; Tamale CoE, Tamale; Akrokerri COE, Akrokerri; and St. Joseph CoE, Bechem.
- The Faculty developed template to capture training needs of tutors in 5 CoE affiliated to KNUST on May 27, 2019. This has been sent and CoE have responded positively.

#### **EXHIBITIONS**

- The Faculty of Art made a profound impact on the premier art world event, the 2019 Venice Biennale, when its students and alumni (Ibrahim Mahama [PhD student], Selasi Awusi Sosu [PhD student] and Prof. El Anatsui [1969 alumnus]) were listed among the key artist-exhibitors at the first ever Ghana Pavilion. Notably, Ghana is one of only five countries that are consistently being cited as the most significant showings of this year's event, and this acclaim is quite simply due to the tireless work of the KNUST Faculty of Art. There have been multiple glowing international press reviews of the Ghanaian contributions to the event with KNUST Faculty of Art firmly in the international spotlight.
- The Faculty's profile was boosted when the 192 flags of United Nations at the famous Rockefeller Centre were all pulled down and replaced with the artist and PhD student Ibrahim Mahama's jute sack flags. The project was commissioned for the Frieze New York's Inaugural Sculpture Fair and is on show from April to 28<sup>th</sup> June.
- A photo exhibition on Otumfuo Osei Tutu II's reign and Ashanti history was the spotlight of the Chancellor's week celebration. The exhibition, facilitated by the Faculty of Art, was curated and installed by Dr. Edwin Bodjawah and his team.

• The Department of Architecture in a bid to showcase the profession and get the general public to appreciate the work of the architect, introduced an exhibition series to exhibit best students' works arising out of design competitions and assignments outside the walls of our studios and department. In that vein, the winners of the "AfroMobitecture Exhibition and Awards" presented their schemes at the BrainGain Conference in Germany in November 2018.

#### PUBLICATIONS

Staff of the College produced 173 refereed journal articles, 84 Conference papers and 2 books in the year under review.

#### SERVICE TO THE COMMUNITY

- To enhance Community impact, the College sought Collaboration with the Kumasi Metropolitan Assembly and three (3) other Municipal Assemblies, namely; Oforikrom Municipal Assembly, Suame Municipal Assembly and the Asokwa Municipal Assembly, in the Kumasi Metropolis.
- The Department of Land Economy was tasked by the University Council to undertake a valuation of all University landed properties. The valuation, which is scheduled to be completed in June 2019, will provide the University with a comprehensive report on all its landed properties and their respective market values.
- Members of staff at the Department of Construction Technology and Management was tasked by the Ministry of Aviation to conduct post-contract value for money audit at the Kotoka International Airport Terminal 3 Project.
- The Department of Architecture carried out a socio-cultural field study of peri-urban environments of Kyebi in the Eastern Region in August 2018.
- The Centre for Settlements Studies organised the first of its kind by an Academic Institution of this country; a short course on Flood Risk Management for Interested persons and officials working in Disaster Management. This was captured on MyJoyOnline and GhanaWeb on 12<sup>th</sup> August, 2018.

# COLLEGE OF ENGINEERING

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## **COLLEGE OF ENGINEERING**

#### INTRODUCTION

The College, in line with the vision of the University, seeks to become an internationally acknowledged Centre of Excellence in engineering education but focused on national industrial development. The College is organized under a three-tier system under the leadership of the Provost who provides, among other things, leadership in the College to achieve this vision.

#### FACULTIES, DEPARTMENTS AND PROGRAMMES

The College of Engineering comprises three Faculties, with eleven (11) Teaching Departments and five (5) Research Centres as listed below.

The Faculties are:

- Civil and Geo-Engineering
- Electrical and Computer Engineering and
- Mechanical and Chemical Engineering.

The eleven teaching Departments in the College are:

- Department of Agricultural Engineering
- Department of Chemical Engineering
- Department of Civil Engineering
- Department of Computer Engineering
- Department of Electrical and Electronics Engineering
- Department of Geological Engineering
- Department of Geomatic Engineering
- Department of Materials Engineering
- Department of Mechanical Engineering and
- Department of Petroleum Engineering

#### **Research Centres**

- Technology Consultancy Centre (TCC)
- The Brew-Hammond Energy Center (TBHEC)
- West African Science Service Centre on climate change and adapted Land-Use (WASCAL- CCLU)
- Regional Water & Environmental Sanitation Centre, Kumasi (RWESCK)
- Transport Research and Education Centre Kumasi (TRECK)

#### Management of the College

The College is managed by the following:

Provost	Professor Mark Adom-Asamoah	
Registrar of the College	ege Mr. Richard Appiah-Nkyi, Esq.	
College Accountant	Mr. Owusu Acheampong	
College Librarian	Mrs. Akua A. Badu Sampene	

Senior Assistant Registrar	Mr. Maxwell Agyemang-Yeboah
Senior Assistant Registrar	Mr. Kweku Appiah-Badu
College Research Assistant Manager	Mr. Percy Quansah

## PROGRAMMES

### Faculty of Civil and Geo-Engineering

	Departments	Undergraduate Programmes
1	Department of Civil Engineering	BSc. in Civil Engineering
2	Department of Geological Engineering	BSc. in Geological Engineering
3	Department of Geomatic Engineering	BSc. in Geomatic Engineering
4	Department of Petroleum Engineering	BSc. in Petroleum Engineering

#### Faculty of Electrical and Computer Engineering

	Departments	Undergraduate Programmes
1	Department of Computer Engineering	BSc. in Computer Engineering
		BSc. in Biomedical Engineering
2	Department of Electrical/Electronic Engineering	BSc. in Electrical & Electronics Engineering
3	Department of Telecommunication Engineering	BSc. in Telecommunication Engineering

#### Faculty of Mechanical and Chemical Engineering

	Departments	Undergraduate Programmes
1	Department of Agricultural and Biosystems Engineering	BSc. in Agricultural Engineering
2	Department of Chemical Engineering	BSc. in Chemical Engineering
		BSc. in Petrochemical Engineering
3	Department of Materials Engineering	BSc. in Materials Engineering
		BSc. in Metallurgical Engineering
4	Department of Mechanical Engineering	BSc. in Mechanical Engineering
		BSc. in Aerospace Engineering
		BSc. in Marine Engineering
		BSc. in Industrial Engineering
		BSc. Automobile Engineering

#### **POSTGRADUATE PROGRAMMES**

All Departments in the College run Postgraduate programmes

#### **STUDENT NUMBERS**

In the year under review, the College registered a total of six thousand, five hundred and three **(6,503)** undergraduate students and five hundred and thirty-three **(533)** postgraduate students.

#### Key College Level Activities College Awards Day

As part of activities for the 2018/19 academic year, the College of Engineering organized the 4<sup>th</sup> Students and Industrial Partners Awards ceremony on 7<sup>th</sup> March, 2019. The aim of the Awards is recognizing remarkable academic achievements of students and also acknowledge the contribution and support of the College's industrial partners, by way of collaborating with the College, in improving the skills of the students. The following categories of Award were conferred on deserving students: *Excellent Student Award*, *Best Student Award and Most Improved Student Award*. There were also Special Students Awards instituted by individuals and corporate bodies for students who satisfied certain criteria. Among the College's numerous industrial partners acknowledged, the following were given Awards: GN ELECRONICS, GNPC-TEHNIP, SPARKS SM GHANALTD, MERICOM SOLUTIONS, GhIE, ASSOCIATED CONSULTANTS HUAWEI, MTN, VODAFONE and others.

#### Career Fair-2019

The College organized a three-day Career Fair from 7<sup>th</sup> – 9<sup>th</sup> March, 2019 for students of the College. The Fair provides a platform for firms to introduce themselves to students and for students to discover opportunities available to them. The companies that participated in the event of this year included: GNPC, HUAWEI TECHNOLOGIES GHANA LIMITED, NATIONAL COMMUNICATIONS AUTHORITY, WILMAR, GN ELECTRONICS, GNPC-TECHNIP, VODAFONE GHANA, MTN GHANA. These firms took turns to address students on their operations, career opportunities and what is expected of employees. Students were interviewed by some of the participating firms and some were selected to, first, serve their national service with them for the possibility of employing thereafter the national service.

#### **Special College Initiatives**

The College continues its efforts at mainstreaming occupational health and safety issues into engineering education. It enforced the use of protective clothing by all students for field work and for laboratory work. Also the College continued its programme of ensuring that all students participate in at least one field trip during the year, and all third year students are sent on vacation training. As a requirement to implementing these activities, the College continued to insure its students against accidents. Engineering Leadership Lecture Series for Third year students was instituted by the College. This is compulsory for all third year students.

## **College Research Office (CRO)**

The objective of the office is to provide research/project management and administrative support services to funded research/project activities in the College. Moreover, CRO also serves as a link between the College of Engineering and the Office of Grants and Research (OGR).

## $6^{\rm th}$ College of Engineering students and industrial partners' awards 2019 and $8^{\rm th}$ Career Fair

The College Research Office continues to provide support in the planning of the Students and Industrial Partners Awards and the Career Fair which was held on 7<sup>th</sup> March, 2019.

It is part of the aims of the College Research Office to document essential information in the College into suitable format as a way of marketing the College. To add to the other exquisite documents that has been produced by the office since its inception, there has been an additional two (2), namely: College of Engineering Strategic Plan 2016-2025 and the Engineering Guesthouse Working Document.

# College of Health Sciences



## **COLLEGE OF HEALTH SCIENCES**

#### INTRODUCTION

The College of Health Sciences comprises the Faculty of Pharmacy and Pharmaceutical Sciences, School of Medicine and Dentistry, Faculty of Allied Health Sciences, School of Veterinary Medicine, School of Public Health, and the Kumasi Centre for Collaborative Research in Tropical Medicine. The College has 39 Academic Departments.

During the year under review, the College vigorously pursued its mandate of training the specialized and graduate manpower for the health sector in Ghana and Africa, through teaching, research and service to the community. These include Physicians, Pharmacists, Nurses, Midwives, Imaging Practitioners, Medical Laboratory Scientists, Public Health, Physiotherapy and Sports Scientists, Herbal Medicine Practitioners, Physician Assistants Practitioners, Veterinary Surgeons, and Disability and Rehabilitation Practitioners. Through an Affiliation agreement with the Ministry of Health, the College supports the Training of Nurses, Midwives and other Paramedics at the Diploma Level by over 70 Health Training Institutions in the Country. The same is done for various University Colleges in the Country.

COLLEGE ADMINISTRATION				
Provost -	Prof. Yaw Adu-Sarkodie			
College Registrar	-Mr. K.A. Karikari			
College Accountant	-Mr. Felix Obeng Boateng			
College Librarian	-Mr. Victor K. Teye			
College Counsellor	-Mr. Samuel Yawson			

#### STAFF AND STUDENTS STATISTICS

The College registered a total of **6,272** students for the 2018/2019 Academic year with a staff strength of 440.

#### ACTIVITIES

#### Introduction of New Programmes of Study

Our major activities as outlined above are in the training of health cadres for the country and some parts of the West Africa Sub-Region. Details are outlined in Reports from the Schools/ Faculties in the College. The Research Unit of the College, the Kumasi Centre for Collaborative Research in Tropical Medicine (KCCR) plays a leading role in Health Research in the Country. It has led in the detection and surveillance of Ebola Virus Disease, Influenza of Avian and Swine origin, meningitis and other diseases of Public Health concern. In doing this, it works closely with the Ashanti Regional Directorate of Health Service and the Public Health Directorate of the Ghana Health Service. KCCR has also been in the forefront of research in Buruli Ulcer, Tuberculosis and Typhoid fever in the country. To Support Teaching, Learning and Research activities of the College, additional classroom and laboratory infrastructure are in various phases of construction. These include for the School of Medicine & Dentistry, Faculty of Allied Health Sciences and the School of Veterinary Medicine.

In the year under review, the College introduced a Ghanaian Sign Language Course for all Students in the College. The Course will support communication for our health trainees with people with hearing difficulties/challenges.

The College Board continues to promote collegiality and interdisciplinary research providing the College with a sense of direction and purpose. The College shall continue to provide Teaching and learning innovations for the good of our students and country.

#### Visitation

During the year under review, the College hosted visitors from the University of Bonn, University of Denmark, and the Liverpool School for Tropical Medicine.

We presented below reports on the various School/Faculties and the Research Centre.

#### FACULTY OF PHARMACY AND PHARMACEUTICAL SCIENCES

The Faculty of Pharmacy and Pharmaceutical Sciences comprises six Departments namely:

- Pharmacy Practice
- Pharmacognosy
- Pharmaceutical Chemistry
- Pharmacology
- Pharmaceutics and
- Herbal Medicine.

#### ACADEMIC PROGRAMMES

The Faculty offers degree programmes in Pharmacy and Herbal Medicine. Over the last seven years the Faculty has replaced the 4-year B Pharm degree programme with the 6-year Doctor of Pharmacy (PharmD) programme and a 2year PharmD top-up programme for Bachelor of Pharmacy holders. The move is to enable the pharmacy graduate acquire contemporary knowledge, skills and competencies with emphasis on patient-oriented roles in place of the product-centreed practice. This will ultimately lead to improve therapeutic outcomes with minimum and properly managed adverse effects to improve the quality of life of the patient. The goal is to keep abreast with the globally changing trends in the Pharmacy profession and education. It is with utmost pleasure that we report that our first batch of the 2-year top-up students graduated in February this year and that the second batch of our 6 year PharmD students are graduating this year.

The Faculty has been in the forefront of graduate studies. Our 3<sup>rd</sup> biennial graduate week held in March this year attracted graduates from sister institutions. Graduate programmes offered include MSc, MPhil and PhD in the pharmaceutical sciences and pharmacy practice.

#### STAFF

#### Promotions

During the period under review, Dr. Asumeng Koffour and Dr. Stephen Gbedema were promoted to the Associate Professor grade. Dr. Edmond Ekuadzi, Dr. Mrs. Mariam El Boake Gyasi and Dr. Mrs Vivian Etsiapa were promoted to the senior lecturer grade. Our former Dean Prof Mrs. Rita Akosua Dickson was elected as the first female Pro Vice-Chancellor of the University.

The Faculty is very excited and proud of these achievements and congratulate our colleagues. We do look forward to more promotions in the years ahead.

#### New Appointments/Return from Study and Sabbatical Leaves

Dr John Adotey returned form study leave after obtaining a PhD in Natural Sciences from the University of Muenster, Germany. Dr. Aaron Opoku Antwi and Mr. Williams Andrew Tetteh were appointed as part-time lecturers in the departments of Pharmacology and Herbal Medicine.

#### TEACHING AND LEARNING IN THE FACULTY

The shift to the 6-year Doctor of Pharmacy programme required that we involved practicing pharmacists as preceptors in the training of our students. In the year under review the University employed 30 practicing pharmacists as adjunct (25) and part-time (5) lecturers to take up these roles. Students in the sixth year spend the entire academic year in selected teaching sites under the mentorship/supervision of preceptors and I am happy to report that the learning experience of students has been tremendous.

The academic performance of students in the Faculty continued to improve; and we remain resolute in ensuring the availability of increased tutorial sessions which afford students countless opportunities to have more interaction with lecturers and academic tutors. The teaching and the technical staff of the faculty remain committed to inspiring our students to keep the momentum and ensure their improved performance is sustained at all times.

#### Peer Mentoring Scheme (PMS)

The Peer Mentoring Scheme (PMS) is in its second year. This was established to support new students of the Faculty and help them settle in their new environment and overcome any stress and confusion. Student mentors continue to be recruited and trained. I must say the youngsters are doing a good job. The Faculty will continue to offer periodic training for these student mentors to ensure that they are equipped with the requisite skills, knowledge and competencies to support their colleagues.

#### White Coat Ceremony for Doctor of Pharmacy Students

The 3<sup>rd</sup> White Coat Ceremony for 193 Doctor of Pharmacy students was held in the year under review. This event highlighted the importance of scientific scholarship and emphasized the highest principles of moral, ethical and unique responsibilities the students were being ushered into as they continued to train to become dependable members of the Healthcare Team. The students were taken through a gowning process in which they were assisted to put on their branded labelled white coats by Senior Members, Preceptors and Parents. The speaker for the occasion was Dr Abdul Rauf the Registrar of the Pharmacy Council of Ghana.

#### Continuing Professional Development (CPD) Training for Pharmacists

The faculty started a continuous professional development programme for the training of practicing Pharmacists in 2018. The goal was to inform/train pharmacists of the changing trends and practices of the profession of Pharmacy. The evaluation of the CPD undertaken by the Faculty last year was adjudged the most highly patronized.

During the year under review, the Faculty received accreditation to undertake CPD in Pharmaceutical analysis and product development (3 credits), pharmacy entrepreneurship (2 credits), health professional regulatory body act (3 credits), cancer awareness (2 credits) and medication therapy management (3 credits). It is our firm believe that we will not rest on our oars but will undertake this all important community service with the commitment it deserves.

#### INFRASTRUCTURE

The newly built 4-storey lecture theatre complex of the Faculty continues to serve the Faculty and the College of Health Sciences very well. A few structural defects have been detected. The development office has been informed and the necessary steps are underway to correct them. Security in the library, ICT centre and students' reading rooms have been strengthened by the provision of burglar proof doors.

#### INTERNATIONAL COLLABORATION

International collaborations have led to the signing of Memorandum of understanding with the School of Pharmacy, University of Eastern Finland, Kuopio, Finland, Florida A & M University (FAMU) USA, Rhode Island College of Pharmacy, USA and St. Joseph College of Pharmacy, USA. This has resulted in several student and faculty exchange. Three (3) students from University of Eastern Finland visited Ghana during the year under review to undertake practical training in pharmacy practice. Prof. Kwame Ohene Buabeng, HOD Pharmacy Practice will be visiting this University in July. Ten of our 5<sup>th</sup> year students will be visiting Florida A & M University (FAMU), from the 15<sup>th</sup> of June to the end of July. Again two of our 5<sup>th</sup> year students will have six weeks practice experience at the Rhode Island College of Pharmacy.

Steps are underway to commence similar collaborations with the University of Michigan School of Pharmacy and University of Illinois at Chicago (UIC), and University of Alberta, Edmonton, in Canada.

#### SERVICE TO COMMUNITY

The Faculty remained steadfast in the provision of services to the community at both local, national and international levels during the year under review. Staff of the Faculty served on many statutory and non-statutory committees of the University. Senior members continued to play mentorship roles while representing the university on the Academic Boards of a number of private universities in Ghana. We continue to provide leadership roles at various levels including the West Africa Postgraduate College of Pharmacists (WAPCP), Ghana College of Pharmacists and the Planned Parenthood Association of Ghana. Other senior members of staff continued to serve as members of the Pharmacy Council, Pharmaceutical Society of Ghana, Traditional Medicine Practice Council, Food and Drugs Authority and the Governing Board of the Centre for Plant Medicine Research and their technical committees. Female lecturers in the Faculty have also been actively involved in the programmes of the Lady Pharmacists Association of Ghana (LAPAG), the female wing of the Pharmaceutical Society of Ghana, which has been at the forefront of championing and finding solutions to public health issues in Ghana.

#### SCHOOL OF MEDICINE AND DENTISTRY

During the year under review, the School of Medical Sciences and the Dental School were merged into one School, now known as KNUST School of Medicine and Dentistry. The merger has impacted positively due to the diverse experiences and professions of the academic members of staff. Even though the School is now one of the most highly preferred medical training institutions in Africa, it is making further efforts to expand its resources, innovate and diversify content delivery and create a learning-friendly environment for both students and staff.

#### ACADEMIC PROGRAMMES

Currently the School offers three (3) undergraduate programmes; BSc Human Biology leading to the MBChB (Bachelor of Medicine, Bachelor of Surgery) and BDS (Bachelor of Dental Surgery)

degrees and BSc Physician Assistantship. In addition, the School offers courses to undergraduate students pursuing the following programmes in the Faculty of Allied Health Sciences, Faculty of Pharmacy and Pharmaceutical Sciences and the College of Science: Emergency Nursing, General Nursing, Herbal Medicine, Medical Imaging, Medical Laboratory Technology, Midwifery, Optometry, Medical Imaging, Sports Science and Physiotherapy, Pharmacy, Veterinary Medicine, Top-up programmes in Midwifery and Emergency Nursing.

At the Postgraduate level, it offers MSc/MPhil and PhD programmes in Human Anatomy and Cell Biology, Human Anatomy and Forensic Science, Chemical Pathology, Clinical Biochemistry, Molecular Medicine, Clinical Immunology, Clinical Microbiology, Mortuary Science and Management, Physiology, Audiology and Speech and Language Pathology. In addition, the Department of Behavioural Sciences in collaboration with the Department of Psychiatry, Faculty of

Medicine and Dentistry, University of Alberta, Canada, has established a postgraduate Masters' programme in Global Mental Health Policy, Services and Development. The maiden class has sixteen (16) students: fifteen (15) Ghanaian students and one (1) International student.

The School also provides courses at the postgraduate level in Anatomy, Physiology and Reproductive Health to the School of Public Health. The Department of Optometry, College of Science also benefits from teaching services of our Departments of Anatomy and Physiology.

The School is involved in the training of postgraduate doctors for the professional membership and fellowship certification of the Ghana College of Physicians and Surgeons and the West African Postgraduate Medical College and specialist medical personnel for the country.

#### SCHOOL ADMINISTRATION AND DEPARTMENTS

The School is headed by the Dean, Prof Daniel Ansong who is supported by the Vice-Dean, Prof Chrissie S. Abaidoo, and 19 Heads of Department.

Teaching and learning and research activities in the School are supported by the Simulation Centre, ICT Centre and Ethics Office.

#### **HUMAN RESOURCE**

The total number of Senior Academic members now stands at 105 which includes 5 Professors, 19 Associate Professors, 34 Senior Lecturers, 37 lecturers, 6 Assistant lecturers, 71 Adjunct Lecturers, 30 technicians and 25 administrative staff. Most of the staff offer specialist clinical services to the Ghana Health Service/Ministry of Health.

Currently there are 1,530 undergraduate students on the Human Biology programme (MBChB, BDS) and 49 on the Physician Assistantship programme. The Human Biology Programme which continues to be oversubscribed yearly has about 5% of foreign students who come from Nigeria, Togo, Benin, Cameroun, Canada, Mali, Pakistan, Cote d'Ivoire, India, United Kingdom and the United States of America.

## ACTIVITIES

#### The Use of Ghana Health Service Facilities as External Teaching Sites

The School continues to use Manhyia, Kumasi South, Maternal and Child Health, South Suntreso and University Hospitals as Affiliate Teaching Sites. Additional Adjunct Faculty with relevant qualifications and experience working in these facilities have been recruited by the University to increase the number of Clinical Disciplines on offer at each Site and decrease Team sizes. Our staff and the Ajuncts teach and offer specialist services at these Affiliate Sites. This is intended to increase the specialist services on offer at these Sites and decongest the Komfo Anokye Teaching Hospital which has served and will continue to serve as our main Teaching Hospital.

The School continues to collaborate with the Ghana Health Service to identify additional Satellite Hospitals to expand the External Teaching Sites concept. The School has also initiated memoranda of understanding with non-Governmental and Private Health Facilities for use of their facilities to support student teaching and learning.

#### Infrastructure Development and Laboratory Equipment

During the academic year under review, with financial assistance from the GETFUND and Internally Generated Funds, the School's two three-storey classroom/lecture theatre complex have progressed at a faster rate. The School has also refurbished its teaching laboratories and expanded classroom spaces for undergraduate and postgraduate teaching. To ensure continuous supply of power in the School, power invertor systems have been installed in the Dissection Hall, Multipurpose Laboratory, Preparation and Tutorial Laboratory, the ICT Centre and Lecture rooms.

The School has procured one hundred and fifty (150) computers to strengthen its ICT/e-learning facility and has initiated processes to modernize its ICT Centre. The School is presently utilizing a Virtual Cadaver System (the first of its kind in any Government Tertiary Institution in the Country) to support teaching and learning in Anatomy. It has also procured over two hundred thousand US dollars (US\$200,000.00) worth of models for the practical training of students. In addition, the School has procured fifty (50) ultramodern microscopes for the Departments of Anatomy, Microbiology and Pathology. The Pathology Department has been resourced with a modern laboratory with ultramodern photomicroscopes for teaching and research activities. The School plans to procure a video demonstration system for multiviewing in Gross Anatomy, additional manikins for the Simulation Centre and is developing a mechanism to use video-conferencing technology in the delivery of lectures in its lecture theatres and teaching laboratories.

The road construction works leading to the Anatomy Multipurpose and Demonstration Laboratories and the Department of Physiology is complete. The external painting of the School has commenced and is expected to be completed by the end of the semester. Plans are well advanced for the installation of solar street lights to improve security in the school at night. The School has installed closed-circuit television (CCTV) at its major entry and exit points and an access control system is being developed at the main entrance to enable 'out-of-hours' staff and students access with ID cards.

#### **EXTERNAL RESEARCH SUPPORT**

The School continues to attract both local and international researchers for research collaborations. The School is at the forefront of malaria vaccine research together with other countries with support from GSK. Other malaria research and capacity building is being supported by the Welcome Trust, EDCTP, Malaria Vaccine Initiative, DFID (UK) and the Gates Foundation.

The Gates Foundation also supports research in Reproductive Health, and Child Survival including growth and stunting. The School has funding from the World Health Organisation for research into Buruli Ulcer and other Neglected Tropical diseases. USAID has provided funding to support research into HIV key populations. The Fogarty Institute (US) is supporting research and capacity building in Injury prevention. Research into kidney diseases and lifestyle diseases (including obesity and hypertension) is supported by the NIH. The Royal Society is supporting research and capacity building in Cancer and aflatoxins, and liver disease.

#### CURRENT RESEARCH PROJECTS IN THE SCHOOL

- Epidemiology of deep vein thrombosis in a tertiary care hospital in Ghana Association of asymptomatic malaria parasitaemia and deep vein thrombosis.
   Principal Investigator: Prof. Isaac Kofi Owusu, Department of Medicine
- Prevalence of Cardiovascular Disease Risk Factors and Target Organ Damage among Ghanaians.
   Principal Investigator: Dr. Fred Stephen Sarfo, Department of Medicine
- The Sickle Pan-African Research Consortium: SPARC
   Principal Investigator: Prof. Alex Osei-Akoto, Department of Child Health
- Training mothers and caregivers to recognize the early clinical signs of pneumonia in children less than 2 years in Ghana: proof of concept study **Principal Investigator: Prof. Daniel Ansong, Department of Child Health**
- Stroke Investigative Research and Education Network (SIREN) Principal Investigator: Dr. Fred Stephen Sarfo, Department of Medicine
- Phone-based Intervention under Nurse Guidance after Stroke (PINGS)
   Principal Investigator: Dr. Fred Stephen Sarfo, Department of Medicine
- Evaluation of Vascular Event Risk while on Long-term Antiretroviral Suppressive Treatment (EVERLAST)
   Principal Investigator: Dr. Fred Stephen Sarfo, Department of Medicine
- Stroke Minimization through Additive Anti-Atherosclerotic agents in Routine Treatment (SMAART trial)
   Principal Investigator: Dr. Fred Stephen Sarfo, Department of Medicine
- Research in "interactions between aflatoxin B1 and hepatis B virus: effect on type 1 interferon signaling pathway" for your reference.
   Principal Investigator: Dr. Patrick Williams Narkwa, Department of Clinical Microbiology
- Phase IIIb Typhoid Fever Vaccine Trial (TyVEGHA)
   Investigator: Prof. Yaw Adu-Sarkodie, Department of Clinical Microbiology

#### RESEARCH SUPPORT SYSTEMS

#### SMD-KNUST Research Electronic Data Capture System (Redcap)

The School of Medicine and Dentistry Research Electronic Data Capture System called **REDCap** is operating in earnest. The REDCap is a mature, secure web application for building and managing online surveys and databases. The application of REDCap's stream-lined process facilitates rapid development of projects. With REDCap's Applicants could create and design projects using 1) the online method from web browser using the Online Designer; and/or 2) the offline method by constructing a 'data dictionary' template file in Microsoft Excel, which can be later uploaded into REDCap. Both surveys and databases (or a mixture of the two) can be built using these methods. REDCap provides automated export procedures for seamless data downloads to Excel and common statistical packages (SPSS, SAS, Stata, R), as well as a built-in project calendar, a scheduling module, ad hoc reporting tools, and calculated fields. Advanced features, such as

branching logic, file uploading, and calculated fields. The platform is ready for use and can be accessed on *rcsms.knust.edu.gh* 

**SMD-KNUST/KATH - Committee on Human Research, Publications and Ethics** The SMD/KATH online ethical clearance application process is an innovation which promotes

paperless activities and also reduces the stress some applicants go through. The innovation seeks to aid applicants to visit the site and create an account which enables them to fill the application forms at any time without limitations and has therefore eradicated the inconveniences associated with physically coming to the office to pick application forms. All the important requirements needed for the process can be found on the site, hence the ethical clearance process will automatically be rejected by the system if the requirements are not met. The reviewing process and approvals are all done electronically on the same platform. This appears to be faster and easier than the manual method. Applicants can access the Ethics online application form on *www. Chrpe.smsknust-kath.org* 

#### Support from Corporate Ghana

The School continues to receive support from corporate institutions in diverse ways particularly in the development of its infrastructure. The Genser Energy has signed an MOU with the School to provide the School with IT equipment and furniture for the next 5 years. Ghana-Reinsurance has consistently over the past 10 years provided support to the School. The School is currently working on strategies to gain support from other Corporate Bodies in the country.

#### Students' Academic Literature Reading Programme

The School of Medicine and Dentistry "**Students Academic Literature reading programme**" is going on successfully. The programme is compulsory for all year groups. Departmental Heads provide articles for their courses and these articles are uploaded unto the Virtual Classroom (Online Learning Platform) for students to access. Students in all the year groups read the articles and come out with summaries of each article which are submitted on the V class platform.

#### **COLLABORATIONS**

The School of Medicine and Dentistry has teaching and research links with the following Institutions:

- Warren Alpert Medical School, Brown University, USA
- University of Michigan, USA
- Stritch Medical School, Loyola University, Chicago, USA
- University of Chicago, USA
- University of Utah, USA
- South Dakota State University, USA
- University of Newcastle, Singapore
- University of Sheffield, UK
- University of Washington, USA
- Medical University of South Carolina
- University College of Ibadan
- Liverpool University, UK

- St George's University of London, UK
- Charite Institute, Berlin Germany,
- Dusseldorf University
- University of Arizona
- University of Hamburg-Eppendorf:
- Onze-Lieve-Vrouw Hospital, Aalst, Belgium,
- James Cook University Hospital, Middlesbrough, UK

During the year under review, seven of our final year students successfully completed a four-week maiden elective in Public Health at the Ensign School of Public Health.

#### **COMMUNITY SERVICE**

The School continues to provide clinical services to Komfo Anokye Teaching Hospital and other Ghana Health Service facilities. In addition, the faculty of the School also serve on many committees of the Ghana Health Service and the Ministry of Health.

#### **Support for Sister Medical Schools**

The School of Medicine and Dentistry continues to offer supporting services towards the growth of Sister Medical Schools including; School of Medical Sciences, UCC and the School of Medicine and Hygiene, UDS. The University has consistently granted permission for the school to support teaching and other academic activities in these institutions. Through an affiliation agreement with KNUST, the School also moderates some Universities and Colleges in the training of health personnel.

#### CHALLENGES

Inadequate office accommodation and laboratories continue to be a challenge for the School. The School still requires more spaces for lecture rooms, laboratories and offices for staff. Additional challenges include the following:

- Inadequate academic staff to deal with the large student population;
- Inadequate modern facilities for teaching and laboratory work;
- Inability of the school to admit majority of the qualified applicants who apply to pursue the BSc Human Biology programme annually.

#### FACULTY OF ALLIED HEALTH SCIENCES

The Faculty of Allied Health Sciences comprises the following Departments:

- Department of Medical Diagnostics
- Department of Nursing
- Department of Physiotherapy and Sports Science

#### Deanship

Dean:	Prof. Alexander Yaw Debrah
Vice-Dean:	Dr. Mrs. Veronica Dzomeku

#### PROGRAMMES

#### Undergraduate, Postgraduate and Other programmes

The Faculty, in collaboration with the College, graduated about 11,000 diploma nurses, midwives and community health nurses this year. Plans are also well advanced to mount BSc Top Up programmes in Nursing, Midwifery and Community Health Nursing in some selected Nursing and Midwifery Training Colleges dubbed "Centres of Excellence".

Two Masters' programme, MPhil Hematology, and MSc/MPhil in Nursing were mounted 2 years ago and we are happy to report that our first products graduated this year. We are ready to mount PhD in Nursing from the next academic year.

#### STAFF

The low staff situation remains a major challenge, especially in some departments such as Nursing, Physiotherapy and Sports Science. We have intensified our effort in our recruitment drive and hope for success. Majority of our lecturers who have Masters degrees have secured various scholarships to pursue PhD programmes. Others are being sponsored by the Faculty. Three of them will complete their PhD programmes this year and six are currently in the UK, Germany, Finland and South Africa.

#### **RESEARCH ACTIVITIES IN THE FACULTY**

The faculty continues to win international grants to do groundbreaking research mainly in Neglected Tropical Diseases (NTDs). This, the faculty does in collaboration with other sister universities such as Edinburgh University in the UK, Bonn University in Germany, Case Western University of the USA, University of Buea in Cameroon, among others.

#### OFFICE ACCOMMODATION FOR LECTURERS AND CLASSROOMS FOR STUDENTS

One of the challenges facing the faculty was lack of adequate office accommodation for lecturers and classrooms for students. However, the faculty's new building at the KNUST Teaching Hospital site was completed last semester and we have moved in and we hope the completion of the School of Nursing building will improve the situation.

# LINK WITH OTHER INSTITUTIONS OF HIGHER LEARNING

The Faculty has exchange programmes with Universities including Westminster University, UK, University of Nottingham School of Nursing, and the School of Nursing, Ramapo College, New Jersey. The School of Nursing, Ramapo College, New Jersey is supporting in the development of postgraduate programmes. Plans are also far advanced to sign MoU with other universities such as University of Bonn in Germany and University of Utah in the USA for student exchange programmes.

#### SCHOOL OF PUBLIC HEALTH

The KNUST, School of Public Health is one of the most dynamic and vibrant schools in the University; very active in teaching, research and service to the community. The vision of the KNUST-School of Public Health is to be the most competitive centre of excellence for the training of public health personnel in Africa and beyond; the public health training institution that attracts students from all over the world to receive a comprehensively rewarding training in public health.

The school has six (6) departments, namely;

- Department of Population
- Family and Reproductive Health
- Department of Occupational and Environmental Health Safety
- Department of Health Policy, Management and Economics
- Department of Epidemiology and Biostatistics
- Department of Health Promotion and Disability Studies and
- Department of Global and International Health.

#### PROGRAMMES

The School runs a PhD programme, short courses and five (5) highly successful 12-calendar months' public health graduate programmes: MSc/MPH Health Services Planning and Management, MSc/MPH Health Education and Promotion, MSc/MPH Population and Reproductive Health, MSc/MPH Occupation and Environmental Health and MPH/MPhil Health System Research and Management. In addition to graduate teaching, the School also runs undergraduate programmes.

The multi-sector research portfolio of the School is directed towards reproductive health, malaria, child health, maternal health, environmental health, health systems, health management and policy and, communicable and non-communicable diseases. Translational research at the School has led to various health policies in Ghana: child health policy concerning the home-based management of malaria, post-abortion care policy, malaria in pregnancy policy, first-line management of uncomplicated malaria, emergency obstetric care and home-based/community-based management of non-severe pneumonia in children under-5 years of age and a review of the national tuberculosis control programme strategy. The School is also involved in sickle cell, diabetes and child survival studies.

#### COLLABORATION

The School has established various linkage/collaborative programmes with internationally acclaimed institutions of repute, United Nations agencies, local universities/university colleges and health-related NGOs.

In addition to contributing to the production of medical doctors and other health professionals at the undergraduate level, the School has produced public health graduates who serve in key areas of health and development in local and internal organizations.

#### SCHOOL OF VETERINARY MEDICINE

The School of Veterinary Medicine (SVM) was established in 2009 as a constituent of the College of Health Sciences of the University at the request of the Government of Ghana through the Veterinary Council, Ministry of Food and Agriculture and accredited to run a six-year Doctor of Veterinary Medicine (DVM) degree programme. The focus of the DVM programme is on delivering high quality veterinary education using "One Health Concept" approach, the first of its kind in the West African sub-region. The School is in close collaboration with other Colleges of the University, essentially the College of Agriculture and Natural Resources, and the College of Science.

The School is made up of five Departments namely:

- Veterinary Anatomy and Physiology
- Veterinary Pathobiology
- Veterinary Public Health and Epidemiology
- Veterinary Clinical Studies
- Veterinary Pharmacology and Toxicology

#### STAFF AND STUDENT NUMBERS

The academic staff is made up of nine (9) permanent and eleven (11) part-time members. These academic members of staff are supported administratively by a Senior Assistant Registrar who is the School Secretary and fifteen (15) others.

Current student enrolment is **136** made up of both local and international students.

#### **STAFF DEVELOPMENT**

The School has two academic staff pursuing PhD programmes. Two others are enrolled in Masters programmes at the Department of Pharmacology, KNUST and Tropical Animal Diseases, University of Pretoria, South Africa respectively. The two students on the Masters programmes are being sponsored by the College.

Additionally, University of Tuskegee, Alabama, has approved admission and financial support for one of our immediate graduates for a PhD programme in Pathobiology to start in August this year per MOU between us.

#### PERMANENT SCHOOL FACILITY

With the partial handing over of the first floor of the Small Animal Teaching Hospital, the School moved from the ground floor of old Pharmacy block to its permanent premises located off the Boadi-Kumasi-Accra road in October, 2018. Currently most lectures are held in this facility. The Teaching Hospital is however yet to be handed over and made functional.

The Small Animal Teaching Hospital is a component of phase-1 of the three-phase SVM complex, construction work of which is on hold due to funding constraints.

#### ACTIVITIES

#### Faculty Exchange Programme

Two of our Lecturers had the opportunity to visit Michigan State University and Iowa State University respectively for a period of one semester on faculty exchange programme sponsored by United States Department of Agriculture.

#### Student exchange programme

Three fifth year DVM students were privileged to visit University of Georgia, Atlanta for a period of five weeks on student exchange programme per MOU between KNUST and University of Georgia.

#### White Coat Ceremony

The School successfully organized the fourth "White Coat Ceremony" which symbolically ushers preclinical students into the clinical phase of the veterinary education. At the ceremony 16 students were decorated with white coats and stethoscopes and were ushered into the clinical phase of the programme.

Dr. Andrew Quarcoopome of Tema Animal Hospital, donated the white coats and the stethoscopes

to the students. He has been making such donations for the past four years and promised to continue same for subsequent years.

#### Oath Swearing and Induction Ceremony

At a ceremony organized by the School, The Veterinary Council of Ghana in partnership with the School inducted 19 new veterinary graduates into the veterinary profession during the year under review.

#### Long Vacation Hands-On Skills Training

As usual, long vacation field trip was organized for the 4<sup>th</sup> and 5<sup>th</sup> year students to enable them acquire hands-on skills. Some selected farms in Kumasi and Ejisu were adopted for the purpose. Students also spent a lot of time at the Kumasi Abattoir Company Limited.

Fifth year students spent four (4) weeks in Accra at:

- Equine Clinic, 38 Military Hospital;
- Veterinary Diagnostic Laboratory, Veterinary Services Directorate;
- Amrahia Artificial Insemination Centre; and
- University of Ghana Veterinary Clinic and Farm

Additionally, the students spent two weeks at the Veterinary Investigation Farm, Techiman. The trip was financially supported by the Provost of the College.

#### **COLLABORATIONS AND LINKAGES**

The School has Memorandum of Understanding for academic collaboration with the College of Veterinary Medicine of Tuskegee University, Tuskegee, Alabama; Purdue University, Lafayette, Indiana; University of Georgia, Atlanta, all in the United States of America; Faculty of Veterinary Medicine, University of Ibadan, Nigeria. Proposed areas of collaboration include faculty and students exchange programmes, research, access to electronic video and audio teaching aids, and partnership in physical infrastructural development.

During the year under review the school was privileged to continue to have the services of two academic staff who have been on sabbatical from University of Ibadan.

Locally, the School has collaboration with Kumasi Abattoir Company Ltd, and Veterinary Services Directorate of Ministry of Food and Agriculture for the use of their facilities in the training of our students.

#### PUBLICATIONS

Forty-four (44) scientific papers generated from research work conducted by academic staff and students were published during the year under review.

#### SERVICE TO COMMUNITY

The staff of the School continue to provide diverse services to community at both local and national levels during the year under review. Such services include:

- College Committees
- University Statutory Committees
- National Committees and Boards

- i. Prof. R. D. Folitse is a member of Veterinary Council of Ghana; member National Accreditation Board Panel of Assessors for accreditation of academic programmes.
- ii. Dr. T. Opoku-Agyemang is a member of National Cancer Board; external examiner to University of Ghana School of Veterinary Medicine; University for Development Studies Department of Veterinary Nursing.

Additionally, the School collaborated with two District Directorates of Veterinary Services and District Directorate of Health Services within the Ashanti Region in partnership with Mission Rabies which is an NGO involved in rabies eradication programme, to undertake anti-rabies campaign programmes during the year under review.

# KUMASI CENTRE FOR COLLABORATIVE RESEARCH (KCCR) IN TROPICAL MEDICINE

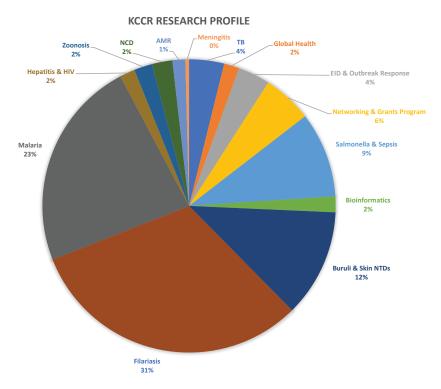
KCCR was established as a joint venture between the stakeholders, KNUST, the Ministry of Health (Ghana) and the Bernhard Nocht Institute of Tropical Medicine of the Republic of Germany to be a Centre of Excellence for Research, Training and Multidisciplinary Collaboration with Local and International partners. It is the Research arm of the College of Health Sciences. It provides state-of-the-art infrastructure and technologies for basic and applied biomedical research. Its mandate is to host and address scientific topics of national interest and of regional and global importance.

#### **STAFF AND STUDENTS**

The staff comprise thirty (30) Core staff and One hundred and forty-nine (149) Research Staff. In the 2018/19 academic year there were eleven (11) PhD candidates and 8 MPhil candidates carrying out their research at the Centre. One hundred and fifty (150) student interns and attachments were offered in the academic year.

#### ACTIVITIES Research

KCCR currently has 56 projects running. The current Research portfolio for the KCCR is illustrated below. Research may be grouped under Filariasis, Buruli ulcer and Skin NTDs, Malaria, Salmonella and Sepis, Networking and Grants programme, Emerging Infectious diseases and outbreak diseases, Global health, Hepatitis and HIV, Zoonosis, Bioinformatics and Non-communicable disease.



#### Collaborations

KCCR has established collaborations with at least 65 institutions locally and internationally. There are 48 collaborating partners associated with the 56 running research projects.

#### Training

- The SEXISS series of workshops run at various times during the year. The series aimed at promoting excellence in science, medical, bio-medical and advanced nursing practitioners, graduate students and early-mid career scientists. The workshops covered areas such as concepts of Scientific Writing with special emphasis on proposal development for grant application; manuscript writing for publications; basic skills in epidemiology with STATA (BASES) and other topical areas.
- In collaboration with other partners such as the School of Public Health, University of Minnesota and the Bernard Nocht Institute of Tropical Medicine (BNITM) KCCR provided a 4-day course in Research Methods.
- Training in Scientific Writing carried out from September 10-12 2018 for 78 participants. Involved faculty from KCCR, KNUST and Noguchi. Details available in separate report and evaluation.
- Training in basic skills in epidemiology with STATA (BASES) held from November 26-29, 2018.
- Course content and material developed and training in Research Methods (REMIND) held from April 15-19, 2019.

#### SERVICE TO COMMUNITY

KCCR collaborates with the National TB control programme in providing, Gene Expert, Drug Susceptibility Testing, Line Probe Assay, and TB culture services to several hospitals in Ghana. KCCR received samples and provided diagnostic confirmation for patients from other regions in the country.

KCCR Buruli ulcer and Skin NTD group is currently collaborating with the Ghana Health Service in providing diagnostic confirmation and training for Buruli ulcer, Yaws and Leprosy. This collaboration is funded by ANESVAD a Spanish NGO. The National Buruli ulcer, Yaws and Leprosy control programmes are working with the KCCR team.

KCCR malaria experts continue to provide training for district hospital staff in slide reading.

KCCR continues to provide viral diagnostic service to health facilities that need it. In the academic year it received patient samples from Komfo Anokye Teaching Hospital.

# College of Humanities and Social Sciences



# **COLLEGE OF HUMANITIES AND SOCIAL SCIENCES**

#### INTRODUCTION

The College of Humanities and Social Sciences (CoHSS) is the largest College in the University in terms of student numbers. It is made up of three faculties, and a Research Centre. These are the:

- Faculty of Social Sciences
- Faculty of Law and
- School of Business
- Its research centre is the Centre for Cultural and African Studies (CeCASt)

#### **COLLEGE ADMINISTRATION**

The College administration is headed by a Provost assisted by a team of administrators and academic staff. The office of the Provost is responsible for the coordination of teaching, research, staff and students' welfare etc. The faculties are headed by Deans, the departments by Heads and the Centre by a Director.

Prof. I. Braimah	Provost
Mr. E.T. Otieku	College Registrar
Mr. James Gambrah	Ag. College Accountant
Mr. Michael Sekyi Boateng	Ag. College Librarian
Mrs. M. Okra	Snr. Administrative Assistant
Mr. S. Baffour Senkyire	Office Support

#### FACULTY OF SOCIAL SCIENCES

The Faculty consists of seven teaching departments namely:

- Department of Economics
- Department of English
- Department of Geography and Rural Development
- Department of History and Political Studies
- Department of Modern Languages
- Department of Sociology and Social Work and
- Department of Religious Studies

#### **ADMINISTRATION OF THE FACULTY**

The Deanery experienced a change in its administrative positions during the year under review. Professor (Sr.) Eugenia Amporfu was elected and appointed as Dean of the Faculty for a two-year term, effective August 01, 2018 to July 31, 2020 while Professor Charles Ofosu Marfo was elected and appointed as Vice-Dean for one-year term.

#### PROGRAMMES

There are eleven (11) **undergraduate** programmes of study in the Faculty.

The Department of Geography and Rural Development offers two undergraduate programmes in Geography and Rural Development and Culture and Tourism. The Department of Modern Languages offers two programmes in French and Akan while the Department of Sociology and Social Work offers two programmes in Sociology and Social Work. The other programmes are Economics, Religious Studies and English.

#### **Graduate Programmes:**

- M.Phil./PhD Geography and Rural Development;
- M.Phil./PhD French
- M.Phil./PhD English
- MA/M.Phil. Sociology
- MSc/M.Phil. /PhD Economics
- MA/M.Phil. /PhD Religious Studies

#### Review of some programmes and new programmes

As part of its efforts at attracting more students and to ensure that its products meet the demands of the market and society, the Faculty reviewed some of its academic programmes. The Academic Board approved the restructuring of the academic programmes into **B.A. Akan Language and Culture** and **B.A. French and Francophone Studies**. In addition, two other new programmes; **B.A Linguistics** and **B.A Communication Studies**, have been introduced. Consequently, a name change from Department of Modern Languages to **Department of Language and Communication Sciences was approved**. This is to ensure that the name of the Department reflects its new direction.

The restructured new programmes are expected to take effect from 2019/2020 Academic Year.

# STAFF AND STUDENTS STATISTICS

The faculty has a student population (as registered during the year under review) of **5,888** with **104** teaching and research staff. These teaching and research staff are assisted by **32** support staff

# ACTIVITIES

#### Physical Infrastructural Development

The Faculty continued to facilitate the construction of its multi-purpose building which started in 2015. Last year, a greater portion of its internally generated fund was spent on the project against other equally competing needs. This was to ensure its early completion to address the accommodation challenges of the Faculty. Inability of the faculty to raise enough resources internally has made it impossible to make the building functional for use. Financial assistance from government and other benevolent organizations/agencies for the completion of the project is, therefore, required.

Apart from the above project, the Faculty made an effort at improving the existing teaching facilities during the year. Replacement of louvre blades and ceiling fans, and painting the interior walls of the lecture rooms at T. Owusu-Ansah Complex were carried out.

#### **Collaborative Links**

The departments of the Faculty are currently collaborating with a number of institutions to build its capacity. The following links have been formalized:

• Collaboration between the Department of Sociology and Social Work and the Social Work Department of Hoshschule Darmstadt University of Applied Sciences (H\_DA), Germany;

- Collaboration between the Department of Sociology and Social Work and University of Utah, USA;
- Collaboration between the Department of Sociology and Social Work and Delaware University, USA;
- International linkage between the Department of Geography and Rural Development and the Department of Geography, State University of New York (SUNY), Geneseo;
- Collaboration between the Department of Geography and Rural Development and the Department of Geography and Geology of the Sam Houston State University of Texas, USA;
- Collaboration between the Department of Economics and the Centre of Excellence in Reproductive Health Innovation (CERHI), University of Benin, Ugbowo, Benin City, Edo State, Nigeria;
- Processes to formalize collaboration between the Department of Economics and the Department of Economics, University of Alicate, Spain, have been initiated;
- The Department of Modern Language continued to enjoy collaboration with the French Embassy, the Chinese Embassy in Ghana and the CEBELAE in Benin;
- The Department of Modern languages is also at the verge of establishing collaboration with the Korea International Cooperation Agency (KOICA) to support its activities.

#### Visitors to the Faculty

Important personalities who visited the Faculty included:

- Prof. Dr. Katrin Luise Laezer (Principal Investigator), the Social Work Department of Hoshschule Darmstadt University of Applied Sciences (H\_DA), Germany, April 01-04, 2019;
- Prof. Samuel Adu-Prah, Department of Geography and Geology, Sam Houston State University, Texas, USA;
- Dean, College of Social Work, University of Utah, USA
- Staff from the French Embassy
- Chinese Ambassador to Ghana
- Staff of Korea International Cooperation Agency (KOICA)

#### **RESEARCH AND CONFERENCES**

Notable among the events that took place within the reporting period were:

- i. International Conference on Geography and Development, Dubbed INCOGaD, under the theme "Climate Change and Sustainable Development", from July 24 27, 2018.
- ii. 3rd. International Conference on "Inter-Religious Dialogue and Global Peace" held on September 06 & 07, 2018.
- iii. Workshop for Teaching Assistants, October 10, 2018
- iv. Employment Forum for final year students, May 29, 2019.

Apart from the above, several academic members of staff in the faculty attended some conferences where papers were presented and also published in several peer reviewed journals. Details of these publications can be found in the University's Quality Assurance Bulletin for the year under review.

## **Grants for Research**

Some departments in the faculty were able to seek grants to support research activities. Among these were grants from the following:

- i. Volkswagen Foundation, Germany; and
- ii. Oxford Policy Management and Ghana Oil and Gas for Inclusion Growth (GOGIG), Ministry of Finance, Ghana.
- iii. Faculty members of the Department of Sociology and Social Work won KREF grants to undertake research.

#### FOREIGN COLLABORATION/PARTNERSHIPS

- The Department of Geography's active international linkages remained with the Department
  of Geography, State University of New York (SUNY), Geneseo. The Department jointly won
  the Canegie African Diasporal Fellowship Program during which Prof. Samuel Adu-Prah
  of the Department of Geography and Geology of the Sam Houston State University of
  Texas, USA visited the Department. The visit was to support the Department in staff
  capacity development in GIS and Hydrology and also to discuss opportunities for future
  collaborations with their respective Universities in the areas of research and teaching.
- The Department of Sociology and Social Work officially launched a new cooperation with the Social Work Department of Hoshschule Darmstadt University of Applied Sciences (H\_DA), Germany, dubbed 'Educational Partnership in socio-pedagogical methods in social work towards improving the lives of Ghanaian children'. The 133, 824.17 Euro Application Oriented Project is funded by DAAD (Project ID: 57448165) with Dr. Esmeranda Manful (Principal Investigator, KNUST) and Prof. Dr. Katrin Luise Laezer (Principal Investigator, H\_DA). The visit and launching took place from 1<sup>st</sup>-4<sup>th</sup> April, 2019.

#### Fellowships

- Mr. Aminu Dramani of the Department of History and Political Studies won one of the prestigious fellowships under the University of Michigan African Presidential Scholars (UMAPS) Programme. The UMAPS programme sends early career faculty from African universities to Ann Arbor, Michigan. During the residency, "scholars are paired with a faculty collaborator during their stay and have full access to the University of Michigan's resources to further their work on a research project, an academic degree, publications, grant proposal, or other relevant activity."
- Dr. George M. Bob-Milliar of the same department also won a fellowship to the Åbo Akademi University (ÅAU) in Finland, under Research Mobility programme.

#### AWARDS

Prof. J. E. T. Kuwornu-Adjaottor of the Department of Religious Studies received the 2018 World Championship Award in Social Science.

#### BENEFACTORS

In the year under review, French Embassy staff visited the University and the Department of Modern Languages and handed over the administration of the Maison Francaise to the University through the Department. The Embassy also sponsored various cultural activities on campus organized in collaboration with Alliance Française and Campus France.

The Chinese Ambassador to Ghana also visited KNUST this year and gave prizes in the form of cash to deserving Chinese learners in the Department to encourage them to be serious in their study of Chinese.

Some management staff of KOICA office in Ghana also visited the Department. Their visit followed a period of discussion via email and telephone, which centred on the need to expand the internationalisation of the Department.

The Department is, indeed, greatly indebted to the French and the Chinese Governments in particular for their continual support and encouragement.

#### CHALLENGES

The following continued to be the challenges of the Faculty:

- i. High Student-Teacher Ratio. As part of its strategies at improving teaching and learning and to reduce the impact of relatively high student-teacher ratio, the Faculty formalised academic tutoring. A workshop was organized to equip teaching assistants with the relevant skill and knowledge for its success.
- ii. Inadequate lecture rooms and office spaces for administration and faculty. Efforts at addressing these challenges resulted to the construction of a multi-purpose building at a permanent site. The project is about 80% complete but funding challenges has stalled the progress of work.
- iii. The absence of language laboratory continued to make the conduct of oral examinations very difficult, inconvenient and time consuming. As a matter of urgency, the Faculty needs a permanent and more spacious language laboratory to make the teaching of languages easier and to ensure that standard is not compromised;
- vi. Absence of reliable alternate source of electricity; and
- v. Absence of large capacity vehicle for field work and outreach programmes.

Though the challenges militated against the Faculty's teaching efforts, it did not entirely bedevil the intellectual impact of the Faculty.

#### FACULTY OF LAW

The Faculty is made up of three departments:

- Department of Commercial Law
- Department of Private Law and
- Department of Public Law

#### PROGRAMMES

The Faculty of Law runs undergraduate and post-graduate law programmes leading to the award of Bachelor's Degree in Law (LL. B) and Master of Laws (LLM).

Additionally, the Faculty is set to begin running its Doctor of Philosophy (PhD) programme during the next 2019/2020 academic year in support of staff development and in contribution to the production of domestically trained legal academics and practitioners.

#### STUDENTS STATISTICS

In the year under review, enrolment for the LLB programme stood at **195** while that of the LL.M. was **21** 

## **STAFF STATISTICS**

The faculty has thirty-two (32) academic members of staff. To help in the administration of the faculty, there are eight (8) administrative staff two of who are senior members.

## **STAFF DEVELOPMENT**

Currently, four members of staff are pursuing their postgraduate research at doctoral level while several others are preparing their proposals for the same purpose. The Faculty's PhD programme which will begin soon is among others, a programme in support of staff development.

# ACTIVITIES IN THE YEAR

#### Moot court competitions

The KNUST Faculty of Law Moot Team has, for over ten (10) years, participated in and won several laurels at various moot court competitions. In February 2019, the Faculty's Moot Team became the national champions for the Philip C. Jessup International Law Moot Court Competition for the third consecutive time to represent Ghana in the international rounds at Washington D.C, USA.

#### Ghana Law School Awards

During the year under review, alumni of the Faculty made the Faculty and the University proud by winning three awards at the 2018 call of new lawyers to the Ghana Bar. The awardees were, Kwasi Amoah Danso (Best Student in Interpretation of Deeds and Statutes); Bertha Asumuah Yeboah (Best Student in Law of Evidence); and Maame Efua Addadzi – Koom (Best Student in Family Law and Practice).

#### INFRASTRUCTURAL DEVELOPMENT

#### The Totoe Research Centre

The Faculty of Law commissioned an ultra-modern Law Research Centre donated by the family of the Late Lawyer Thomas Asamoah Totoe. Facilities and resources in the centre includes:

- Video Conferencing
- HeinOnline Database
- Law Finder Database
- Law Journal Library
- Electronic Books
- Electronic Journals
- Theses and Dissertations
- Cases and Treaties
- World Constitutions etc.

#### **Creation of New Spaces**

New and well-equipped spaces have been created in the Law Library for Master's and PhD students to enhance research and collaborative learning. The discussion area in the Library has been renovated.

#### **Online Version of KNUST Law Journal**

The KNUST Law Journal is now online and can be accessed through lawj.knust.edu.gh. This has increased the visibility of the Journal and citation indexes of Authors of the Journal; majority of whom are members of the KNUST Law Faculty.

#### 15<sup>TH</sup> ANNIVERSARY CELEBRATIONS

The Faculty celebrated its 15<sup>th</sup> anniversary in the year under review and to commemorate that, a grand durbar was held at the Faculty's premises on the 25<sup>th</sup> of April 2019. The durbar was graced by a myriad of dignitaries including renowned Judges, Lawyers, Ministers of State, Lecturers and students and the Chief Justice of Ghana. The theme for the celebration was, "Law, Science and Technology in the 21<sup>st</sup> Century".

#### **STAFF RESEARCH**

A significant number of academic papers were published by Senior Members of the Faculty in the 2018/19 academic year. Details of these can be obtained from the University's Quality Assurance Bulletin for the year under review.

#### **KNUST SCHOOL OF BUSINESS**

The KNUST School of Business (KSB) runs undergraduate and postgraduate degrees in business administration and management in all its specialisations to meet the needs of prospective students. The School has four (4) academic departments namely:

Department of Accounting and Finance

Department of Human Resources and Organisational Development

Department of Marketing and Corporate Strategy and

Department of Supply Chain and Information Systems

At the **undergraduate** level, KSB offers two programmes namely:

BSc. Business Administration with options in:

Accounting

Banking and Finance

Logistics and Supply Chain Management

Marketing

Human Resource Management

**Business Information Technology** 

International Business Management and

BSc. in Hospitality and Tourism Management

At the graduate level, the School offers the following programmes:

#### MBA Master of Business Administration with options in

- Accounting
- Finance

Marketing

Strategic Management and Consulting

Human Resource Management

Management and Organizational Development

Logistics and Supply Chain Management

Management Information Systems (MIS)

#### MSc Marketing

Logistics and Supply Chain Management Management and Human Resource Strategy Accounting and Finance Finance Procurement and Supply Chain Management Corporate Governance and Strategic Leadership Aviation Management

PhD Business and Management

Leadership and Organisational Development

Doctor of Business Administration

#### PROFESSIONAL PROGRAMMES

The Department of Supply Chain and Information Systems (SCIS) runs professional programmes of the Chartered Institute of Logistics and Transport (CILT-International) under the Department's Centre called West African Institute for Supply Chain Leadership (WAISCL).

**CIPS** Accreditation

In April, 2019, the Department of Supply Chain and Information Systems obtained accreditation from the Chartered Institute of Procurement and Supply (CIPS) – UK, for MBA (Logistics & Supply Chain Management), MSc. Logistics & Supply Chain Management and MSc. Procurement & Supply Chain Management programmes, whereby students would graduate as chartered members of CIPS, after completing any of the above mentioned programmes and subscribing to CIPS.

#### **RESEARCH CAMP EFFORTS**

In fulfilment of its mandate for research in business and related fields, the School organized the first in a series of research camp for faculty and PhD and DBA students facilitated by international academics and scholars. This research camp is intended to sharpen the research skills of participants.

#### STAFF DEVELOPMENT

In fulfilment of the policy on faculty obtaining their terminal degrees, three members of the staff obtained their PhD. In all, about six (6) faculty were promoted to the rank of Senior Lecturer during the year under review.

#### COLLABORATIONS

Through its academic departments, the School has collaborations with relevant professional bodies and industry to enrich teaching, research and learning. The School continues to collaborate with the Carnegie African Diaspora Fellowship Program (CADFP) which offers staff and students exchange opportunities.

In addition to this, the School also has a collaboration with the Arizona State University (ASU) for the 3+1+1 programme for students to do three years of undergraduate studies at the KNUST and go to the ASU to do one year to finish the bachelor and a further one year for the Masters.

The KSB also collaborates with the Association of Small-Scale Industries (ASSI), Ashanti Region Branch.

#### **RESEARCH PUBLICATIONS AND CONFERENCE PROCEEDINGS**

Altogether, faculty members in the School published fifty-two (52) articles in refereed journals and two refereed conference papers in the year under review.

#### AWARDS

During the period under review, the School participated in the HR Focus competition held in Accra and won the preliminary stage. It is awaiting the second and final stages of the competition.

# CENTRE FOR CULTURAL AND AFRICAN STUDIES (CeCASt)

#### PREAMBLE

The Centre seeks to create a synthesis between the Performing Arts and African cultural practices as well as in scientific and technological findings and inventions to meet contemporary societal needs. To promote these objectives further, Professor Kofi Osei Akuoko has been appointed the Acting Director of the Centre effective 2018/2019 academic year.

The Centre undertakes research and provides elective courses for students under the African Studies programme. Since 2018, the Centre has also hosted the Multi-Disciplinary Masters' and Certificate level courses in Chieftaincy and Traditional Leadership Studies programme for Chiefs, Queen mothers and Registrars of the various houses of Chiefs in Ghana and elsewhere.

#### STAFFING

The Centre has twelve (12) senior members of staff for the year under review. These Senior members are supported by twelve (12) other members of staff in the running of the Centre.

#### **DOCTORAL PROGRAMMES**

Mr. Hesper K. Adesua is pursuing a Doctoral programme at the University of Cape Coast.

#### TEACHING

#### Programmes on offer

The Centre in 2018 mounted the African Studies programme with ten (10) courses in the first semester and ten (10) courses in the second semester.

The Centre has also started the MA/MPhil Chieftaincy and Traditional Leadership programme as well as Certificate in Chieftaincy and Traditional Leadership programme. They are designed to build the capacity of key actors of the Chieftaincy Institution and the related establishments. This is a modular programme of two years' duration and divided into four modules. Participants/ students enrolled in the programme may terminate their studies after completing one or two modules and obtain the required certificate(s).

The programme attracted fourteen Chiefs, Queen mothers and Registrars from the various house of Chiefs in the country. The Centre organized its first public lecture on the 10<sup>th</sup> of April, 2019. It was titled "Why Do the Asante Vote for the New Patriotic Party in National Elections?" and it was delivered by Dr. George M. Bob-Milliar a research fellow at the Centre. The lecture attracted about 150 people who were both lecturers and students.

#### Services to Departments and Institutions

Some senior members continued to render services to other Departments in the College. These are the Department of Geography and Rural Development (Culture and Tourism section) and the Department of Integrated Rural Art and Industry. Staff also organized tutorials for private groups

and individuals of the University community in some areas of the performance arts - drumming, dancing and traditional cloth wearing. This was done upon request.

# **OTHER ACTIVITIES**

#### Seminar for film directors, producers and artistes

CeCASt organized a one-day seminar at the Faculty of Law Auditorium for Film Directors, Producers, Artistes and other crew members of the movie industry in Ghana. The seminar was at the request of the Film Directors Guild of Ghana (FDGG), Ashanti Region Branch as part of the on-going collaboration between CeCASt and the movie industry in Ghana. Speakers were drawn from the Faculty of Law, Department of Sociology and Social Work, Department of Modern Languages and the Centre for Cultural and African Studies (CeCASt). The theme for the seminar was "The Film Industry in Ghana: Challenges and Prospects."

The Centre has plans to organize training workshops periodically for players in the movie industry to upgrade their skills to enhance quality film productions in Ghana.

#### **OTHER SERVICES**

Mr. Aidoo assisted executives of the Film Producers Association of Ghana (FIPAG) to write a proposal which was submitted to the Government requesting the establishment of an Endowment Fund for practitioners in the movie and cultural industry.

#### COLLABORATIONS AND COORDINATING ACTIVITIES

The Centre continues to collaborate with bodies such as Kumasi Metropolitan Brass Bands, Association of Ashanti Choral Groups, Springverve Drama Group, Agya Koo Nimo and Adadaem, Akan Film Producers Association and Centre for National Culture Folkloric Group.

#### **RESEARCH/PUBLICATIONS**

Some senior members and other staff at the Centre continue to engage in research activities and programmes in their areas of specialty in African Studies and Performing Arts. Some of these are:

- A Visual Documentation of Mr. Daniel Amponsah's works in Palm Wine Music is ongoing.
- Digitalization of Mr. Daniel Amponsah's work for the KNUST Library is underway.
- Research work on "The Making of the Akan Traditional Queen" is being carried out by staff of CeCASt with the support of some traditional rulers in Ashanti.

During the year under review, researchers of the Centre published fifty-seven (57) papers details of which can be found in the University's Quality Assurance Bulletin for the year under review.

#### CeCASt LIVE BAND

The Centre has upgraded its resident live band to enhance its performance and services to both the university community and the public. Additional instruments - Speakers, Combos, Amplifiers and other accessories have been purchased at the cost of Gh@50,000.

#### THE WAY FORWARD

In the coming academic year, the Centre will consolidate these new initiatives and strengthen the Masters' course.

In addition, new short courses on traditional leadership skills, resource governance in traditional settings, African culture, Ghanaian Diaspora, Asante society and culture will be introduced to target the study aboard market and traditional rulers.

**Research** – the Centre will focus on attracting grants and building relevant partnerships with reputable research Centres in Africa and in the Global North.

**Arts** – the Centre will strengthen its collaboration with the Kumawood industry in the areas film production and documentation.

# COLLEGE OF SCIENCE



OFFICE OF THE PROVOST CONFERENCE CENTRE LIBRARY

DEPARTMENTS •BIOCHEMISTRY AND BIOTECHNOLOGY •FOOD SCIENCE AND TECHNOLOGY •OPTOMETRY AND VISUAL SCIENCE •COMPUTER SCIENCE •MATHEMATICS •ACTUARIAL SCIENCE

AS === 3163-13

# **COLLEGE OF SCIENCE**

#### INTRODUCTION

The College of Science is the third largest College in the University, with an overall student population of 7858, comprising 7578 undergraduates and 280 postgraduates, with a staff strength of 267. The College, in pursuance of its slogan "Premier and preferred College of Science", makes every effort to maintain high standards through team work, dedication to duty, discipline and excellence. These efforts always lead to the provision of quality training, research, and extension services in the basic and applied sciences, towards national industrial and economic development. The College continues to pursue this mandate in earnest, with the goal of becoming an established centre of excellence for the advancement of knowledge in the sciences, nationally and internationally.

#### STRUCTURE OF COLLEGE

The College is headed by a Provost who is assisted in the day to day administration and management by a College Registrar, Senior Administrative support staff, Deans and Heads of Department.

The College is made up of two (2) faculties with ten (10) departments; namely;

#### Faculty of Biosciences

- Department of Biochemistry and Biotechnology
- Department of Food Science and Technology
- Department of Optometry and Visual Science
- Department of Theoretical and Applied Biology
- Department of Environmental Science

#### Faculty of Physical and Computational Sciences

- Department of Chemistry
- Department of Computer Science
- Department of Mathematics
- Department of Physics
- Department of Statistics and Actuarial Science

#### **COLLEGE ADMINISTRATION** Prof. (Mrs.) Ibok Nsa Oduro

#### Provost

Mr. V. A. Ankamah-Lomotey	College Registrar
Mr. Festus Nyame	Senior Assistant Registrar
Mr. Kofi Adu	College Accountant
Mr. Richard Bruce Lamptey	Ag. College Librarian
Mrs. Mavis Osei Boateng	Junior Assistant Registrar

#### ACADEMIC PROGRAMMES

The College runs twelve **undergraduate** programmes and several **postgraduate** programmes. There are efforts to introduce more postgraduate programmes at the Master's and doctorate levels. Apart from the regular programmes, a number of programmes are offered through the distance learning mode. These include postgraduate programmes in Environmental Science, Information Technology, Food Quality Management, Industrial Mathematics, and a top-up programme in Optometry & Visual Science, as well as undergraduate programmes, in Statistics, Information Technology, among others.

# NEW ACADEMIC PROGRAMMES

Students were admitted for the PhD Vision Science programme for the 2018/2019 academic year. The College Board has recently reviewed and recommended programmes in MSc/MPhil and PhD in Biodata Analytics and Computational Genomics, and PhD in Information Technology from the Department of Biochemistry and Biotechnology, and Department of Computer Science, respectively. The necessary documents have been forwarded to the Dean, School of Graduate Studies, for consideration and necessary action.

# **ACTIVITIES IN THE YEAR**

The period under review witnessed some significant developments and activities at the College, Faculties and Departmental levels, highlights of which are provided below.

#### STAFF RECRUITMENT AND PROMOTIONS

During the period under review, the College did not recruit any new lecturers because of the embargo on employment. The College has however, identified some high caliber staff needed for critical areas and has processed their documents awaiting approval to forward same to the University Appointments and Promotions Committee.

Seven Senior Members were promoted: Three Senior Lecturers were promoted to Associate Professors, Three Lecturers to Senior Lecturers and One Assistant Lecturer was upgraded to Lecturer.

Six senior staff were also promoted. One staff in the Junior Staff category was promoted.

#### LEARNING ENVIRONMENT

#### The Learning Commons

In addition to the Learning Commons that was created by the College last academic year, some departments (Theoretical and Applied Biology Department and Chemistry Department) have created learning commons in their departments to augment what the College has to ease the pressure on the College Learning Commons.

The College, in collaboration with KNUST GRASAG has created and successfully commissioned a 52-seater GRASAG Mini Research Commons fully equipped with work stations and internet services. In addition to this, the Department of Physics has also created another Mini Research Commons for its postgraduate students.

#### **Library Development**

The College has created a 32-seater electronic library space to provide access to online resources, online e-journals, electronic documents and virtual resources. The facility will provide better services for researchers to access the structured information from the desk top in the College library.

The College has installed a public address system in the College Library for announcements and also access control gates at the library to restrict the use of the facility to only students and authorised persons.

The College has replaced the wooden chairs in the College Library with a much more comfortable chairs to make studying in the College more conducive and encouraging.

#### Laboratories

Some laboratories in the College were equipped with state-of-the-art equipment to help both staff and students in their research work and studies.

With a \$30,00.00 grant from an internationally funded collaborative project (the West African-Michigan Charter II for GEOHalth) between the Department of Theoretical and Applie Biology and School of Public Health, KNUST, an Atomic Spectrophotometer (AAS) and some accessories were purchased and installed in March 2019 to kick-start the establishment of an environmental quality laboratory. This laboratory is expected to attain international status through certification schemes to be able to provide high quality laboratory analysis for companies both within and outside Ghana.

#### **New Departments**

The Department of Environmental Science and Department of Actuarial and Statistics would be autonomous and operational from the beginning of the 2019/2020 academic year.

#### **CAPACITY BUILDING**

#### a) College of Science Students' Achievement Programme

The College's Students' Achievement Programme continuous to offer assistance to students to improve their academic output. This academic year's programme started on 26<sup>th</sup> November, 2018 and ended on 21<sup>st</sup> December, 2018. In all, One Thousand, Three Hundred and Eighty-Eight (1388) students were taken through intensive tutorials to help better their results.

#### b) Short Courses/Workshops

Departments in the College organised short courses to offer hands-on experience to participants. In collaboration with the Pan African Chemistry Network, the Department of Chemistry organized the Second Gas – Mass Spectrometer (GC-MS) training workshop for the West African Sub-Region. This saw participants coming from Cameroon, Senegal and Ghana.

The Department of Food Science and Technology also organised a Food Hygiene Certificate training for 25 Food and Beverage Staff of the Engineering Guest House-KNUST. Pnuematic Food Scientifics Ghana collaborated with the Department of Food Science and Technology to organise a Food Business Skills Short Course for 22 food business startups.

On March 14 and 15, 2019, the College organized an open access workshop with sponsorship from the Electronic Information for Libraries (EIFL), Netherlands.

The workshop was on the theme; "Open Access Data Science Train-The Trainer Workshop for Libraries in Ghana". Participants were from doctorate degree (PhD) awarding universities in the country.

KNUST-LISA in collaboration with the Ministry of Environment, Science, Technology and Innovation (MESTI) and the School of Public Health, KNUST, proposed a two-part residential workshop to train a cohort of 24 early to middle career women drawn from government establishments, in statistical data analysis for decision making and strategic planning.

The Project is being sponsored by United States Agency for International Development (USAID) through LISA 2020 of the University of Colorado Boulder. The first workshop on 'Building Capacity of Female Scientists in Data Analysis for Decision Making and Strategic Planning' was held from 1<sup>st</sup> to 5<sup>th</sup> April, 2019 with 26 participants.

#### c) Seminars and Conferences

As it has become an annual affair, the College, this year also collaborated with the Ghana Science Association to organise a seminar and poster presentation to help strengthen the research capacities of members of staff. This is also to foster collaboration between the College, the Association and Research Institutions in Ghana and beyond, to advance knowledge in science to solve societal problems.



This year also, the Faculties organised seminars for both members of staff and students to make presentations.

The College, again, in collaboration with the College of Humanities and Social Sciences organised the second KNUST Food Festival and Conference whereby presentations were made on local delicacies and an exhibition carried out to showcase rich Ghanaian delicacies. Participants had the opportunity to taste the exhibits. This time round, students from second cycle institutions participated in the cooking of the local delicacies.

In the year under review, the College organised the second edition of the Science Café on 5<sup>th</sup> April, 2019. The theme for the second edition was "Addressing Youth Unemployment in Ghana, the Way Forward". The media, students and other stakeholders were invited to share their views on the topic.

The College organised a seminar title AFTER SCHOOL, WHAT NEXT? The seminar was organised by the College on the 27th February 2019 at the College of Science Auditorium. The sole speaker was Prof S.N. Odai, the Head of Civil Engineering Department. The seminar was used to prepare final year undergraduate and graduate students as well as service personnel adequately for life after school. Students, mainly from the Colleges of Science and Engineering attended. In all about 500 students attended the seminar.

#### COLLEGE OF SCIENCE AND SCISA, KNUST STUDENTS CAREER FAIR 2019.

A one-day career fair (April 12, 2019) took place at the College. This happens to be the maiden edition of such a fair within the college. It was aimed at getting students to have a real-life experience of career opportunities the various programmes of study offer them. These companies were brought on board to enhance the student's interest and boost their morale to do more for themselves in their field of study and also foster the calibre of graduates this college want.

The fair ran throughout the day, seeing enormous participation from students and staff. Some students earned themselves internship slots. Feedback from some student participants indicated

that most of them had become more appreciative of the programmes they were reading as they had no or little interest when they were given the programmes and also had a reason to strive to be the best among their peers, these were the thoughts of most first and second year students.

# COLLEGE OF SCIENCE E-NEWSLETTER AND STRATEGIC PLAN

In the year under review, the College reported on all activities in the College through its electronic newsletter to update both staff and students in the College on the happenings within the College. Currently, we have had at least nineteen (19) editions featuring among others current events, programmes, workshops, staff recognitions. The College has moved a step forward in the distribution of the e-newsletter by adding all the University staff.

The College of Science Strategic Plan (PLAN 2K25) is now ready and about Three Hundred copies have been printed for distribution to staff and our stakeholders.

# COLLEGE RESEARCH INITIATIVES

- College Office of Grant, Research and Innovation
  - Funding Opportunity Announcements (FOAs)

In the past year the office reviewed 70 potential funding opportunities and identified 30 eligible calls for members of staff in the College of Science. These were sorted out and circulated to all targeted staff.

- i. Calls in the area of health and food 25
- ii .Calls in the area of P
- iii. Physics and climate change 4
- iv. Travel grants 1
- Calls Responded To

FOA	LEAD
World Bank proposal	Prof Ellis and OGR team
DFID proposal	Dr Pandam Salifu
DFID proposal	Dr Bright Kwakye
Eleanor Crook Foundation proposal	Dr Reginald Annan
Korb-Exford Dry Eye proposal	Dr Kwadwo Akuffo
BSK research Fellowship	Dr Kwadwo Akuffo
Travel grant proposal	Dr Smith-Aggrey
ARVO Grant proposal	Dr Kwadwo Akuffo

Feedback is yet to be obtained for that of DFID proposals. The others were unsuccessful but it was worth going through the process.

- Challenging Areas/ Strategy Going Forward
  - i. Visibility and Knowledge

Some staff are yet to know of the existence of the Office of Grants, Research and Innovation and what it does. The office is however, making efforts to show such staff the ways in which the office can help them in their research and grant applications. The office plans to take advantage of morning common room/tea room meetings of the various departments to create awareness of the existence of the office and educate staff on the mandate of the office including the provision

of expert advice on grants and funder requirements and also take care of all administrative aspects of grants.

ii. An Active Writing Committee

The office lacks an active writing committee and therefore, most identified funding opportunities are not utilised. To help overcome this problem, the office plans to engage younger members of staff and task them with the role responding to funding announcements identified while the other long serving staff members are retained as supervisors or facilitators.

#### POSTGRADUATE SCHOLARSHIP AWARDS

The College of Science Postgraduate Scholarship Committee is working tirelessly to screen the documents of 46 applicants who have applied for the second Postgraduate Scholarship awards. It is our belief that the winners would be awarded the scholarship before the beginning of the 2019/2020 academic year.

#### TRAINING WORKSHOP FOR STAFF

In the year under review the College organised various workshops for the Academic, Technical and Administrative staff in the College on different occasions. Staff were trained on: How to use referencing management tools, access to E-References, how to identify credible journals, how to be visible online, self –archiving in KNUSTSpace and use of 'Turnitin'.

The Department of Chemistry also organised a one-week training workshop on Glass Blowing for all Technicians in the College. The participants had hands-on experience of blowing glass into different scientific glassware for the entire week. This is part of a series of training to staff the Glass Blowing Unit for full operation in the coming year.

#### COMMUNITY ENGAGEMENT

#### Science and Technology Seminar Series for females in first cycle Institutions

The project is an initiative of a team of DANIDA alumni in partnership with the College of Science to make Science, Technology, Engineering and Mathematics (STEM) friendly to females in first cycle Institutions. It was piloted in June 2018 for the Ayeduase community with grant support from the Danish Ministry for Foreign Affairs and the DANIDA Fellowship Centre. Post intervention engagement by the College with support from the Vice-Chancellor, has led to the renovation of the Ayeduase R/C junior High School ICT laboratory. The Vice-Chancellor also provided the school with 50 laptops for use in the refurbished laboratory. In addition to this, the College also donated a projector to the school to aid teaching and learning.



Following the success story of the maiden seminar, DANIDA has awarded a second grant for the project to be replicated in the Kotei Community this year as well as a seed fund to curtail some of the sanitation challenges at the Ayeduase R/C school. The team is partnering with the Regional

Water and Environmental Sanitation Centre, Kumasi (RWESCK) to provide the appropriate remedy in the school.

A Community Outreach Committee has been constituted by the College Board to coordinate community engagement activities of the College.

#### INTERNATIONAL ACTIVITIES/ENGAGEMENTS Collaborations and MOUs

KNUST - ISA LILLE Activities (2018/19 Academic Year)

In 2017, KNUST partnered ISA Lille, France, to win an Erasmus+ Mobility Grant of € 96,720, funded by the European Union to promote faculty and student mobility between the two institutions for the next two years. This grant has helped to support the 3+2 accelerated MSc programmes in Environmental Science and Food Science currently being run in partnership with ISA Lille, France. To date, a total of 9 students (6 from Food Science and Technology, and 3 from Environmental Science) have been supported to study abroad at ISA Lille. Seven faculty members (Prof. M. G. Addo, Dr. J. N. Hogarh, Dr. A. K. Anning and Rev. S. Akyeampong from Environmental Science/ Biology, and Dr. J. K. Agbernorhevi, Dr. (Mrs.) F. D. Wireku-Manu and Dr. H. Lutterodt) have also visited ISA Lille as on Teaching/Training mobilities. In February this year, three faculty members together with the International Relations Officer from ISA-Lille also visited the College of Science on Teaching Mobilities. While here, they were also involved in conducting interviews to select the next batch of students who would study abroad at ISA in the 2019/2020 academic year. Even though the EU funding for the current project with ISA Lille ends this year, an application has been submitted for renewal for the next two years. The outcome of this application would be known in July this year. The initial MOU with ISA Lille, which also ends in June this year, has been renewed by the two parties for another five years and expanded to include Agricultural Science. In the new MOU, first year tuition fees have been waived for self-funded students who participate in the 3+2 accelerated MSc programme.

#### Memorandum of Understandings (MOUs)

In the 2018/2019 academic year the College through the University signed MOUs with both National and International institutions. MoUs were signed with the Koforidua Technical University, Hacklab Foundation, University of Sierra Leone, HPW Fresh and Dry Limited, University of Makeni (UNIMAK), Sierra Leone, Eridec Ghana Limited and Vodafone Ghana.

#### Visitors

In the year under review we had visitors from the following institutions: Aarhus University, University of Leeds, UK, Michigan State University, Nestle Ghana Limited, Institute of Meteorology, Germany, Uthmaniya SHS and Ghana Audit Service.

#### **STUDENT ACTIVITIES**

In the year under review, SCISA organised several activities for its members. There activities were sports, beauty pageant, SCITALK etc. Alumni of the College who have made it in areas of Science and Entrepreneurship were invited to share their experiences as students and life after school with students.

The maiden SCISA KURA ME MU (meaning SCISA is supporting me) initiative was instituted to provide food packages for needy students in the College.



#### DONATIONS

As has been the case over the past few years, the College received cartons of books, donated by Ramapo College of New Jersey, in the United States. The books, many of which were redonated to some senior high schools, covered disciplines in both the basic and applied sciences.

The College again through the Department of Optometry and Visual Science received contact lens production equipment from Volunteer Optometry Services to Humanity.

The College in addition to the above, also donated tables and chairs to KNUST primary school library. Some assorted books were also donated to the Aboabo Community Library, Kumasi High School and Christian Methodist Senior High School (Accra).

#### AWARDS

In 2018, the College won the best College in Environmental Ranking. Ghana Science Association – Kumasi Chapter, awarded and appreciated the College for its longstanding collaboration with the association.

#### WOMEN IN SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS GHANA (WISTEM.<sub>Gh</sub>)

#### BACKGROUND

The Women in Science, Technology, Engineering and Mathematics, Ghana (WiSTEM.<sub>Gh</sub>), is an initiative of the Provost of the College of Science in collaboration with the Vice Chancellor's office, KNUST. WiSTEM.<sub>Gh</sub> is spearheading a paradigm shift as far as the underrepresentation of women in STEM careers is concerned. Towards this, WiSTEM.<sub>Gh</sub> seeks to improve the enrollment of girls into STEM programmes, build their self-confidence to pursue and maintain successful careers in STEM fields, and to provide female-to-female mentorship and leadership support at every stage of their career.

#### STRUCTURE

The activities of WiSTEM.<sub>GH</sub> are governed by the Core Executive Committee, which comprises of female senior members representatives from five (5) out of the six (6) Colleges in the university.

The Executive Committee has a President, who chairs all activities of WiSTEM.<sub>Gh</sub>, a Secretary and Twelve (12) distinguished women scientists from the various colleges.

#### ACTIVITIES FOR THE YEAR UNDER REVIEW Girls Camp 2018

In August 2018, WiSTEM.<sub>Gh</sub> organized the maiden edition of the Girls camp. A total of eighty (80) girls and ten (10) tutors from eight (8) Senior High Schools attended the Camp. This was a 5-day non-residential camp during which the girls were bused on daily basis to KNUST campus. Apart from assigning them to mentors, the girls were exposed to several practical, scientific and technological experiments. They also participated in industry tours and as well, tasked to come up with projects during the period.

# Official WiSTEM. Gh Launch

After the successful girls' camp programme, WiSTEM.<sub>Gh</sub> was official launched as a nationwide movement to campaign for the active participation of women in STEM. The main sponsor for the launch was Vodafone Ghana with ancillary support from the Office of the Vice Chancellor-KNUST, Ministry of Environment, Science, Technology and Innovation (MESTI), Touton, Ghana Textile Printing Company Limited (GTP) and Premier Foods. The Deputy Minister, MESTI (Honorable Patricia Appiagyei) was the keynote speaker with two resource persons who were identified and invited to give inspirational talks. A total 535 participants registered and attended the launch, chaired by Dr (Mrs.) Mary Afihene, a Physician with specialty in Gastroenterology at the Department of Medicine, KATH. In delivering the welcome address, the Pro Vice Chancellor, Prof (Mrs.) Rita Dickson reiterated the University's desire to improve STEM education as part of its cooperate responsibility and importantly alongside its vision. She further stressed the VC's desire to support and bring to fruition improvement in the representation of females in STEM at KNUST.

Sister institutions declared their intention of initiating WiSTEM branches in their respective institutions.

# Colloquium (International Year of the Periodic Table 2019)

The year 2019 has been designated by the United Nations as the international year of the periodic table to mark 150 years of its existence since creation by Dmitry Mendeleev. The International Union of Pure and Applied Chemistry (IUPAC) proposed this year to raise global awareness of chemistry and show how the periodic table is central to and linking cultural, economic and political aspects of the global society through a common language. In view of this, WiSTEM. <sub>Gh</sub> KNUST chapter, in collaboration with the Department of Chemistry KNUST organized an

<sup>ch</sup> INVOST enabled, in conaboration with the Department of Chemistry (NVOST organized an IUPAC Periodic Table day celebration for girls. This took place on February 12, 2019 at the Allotey auditorium, College of Science Complex, KNUST, on the theme, "The Role of Women in the Development of the Periodic table".

#### Maiden WiSTEM Mentoring workshop

The local KNUST Chapter organized a day's workshop on Mentoring. Members of WiSTEM spearheaded this needful agenda and came up with a roadmap on the WiSTEM mentoring scheme.

#### **Schools Outreach**

The Executive members of WiSTEM.<sub>Gh</sub> were grouped and assigned visitation to the Senior High Schools who participated in the maiden edition of the Girls Camp. This visitation was a follow-up to evaluate progress of the girls after the camp.

WiSTEM visited University of Energy and Natural Recourses on the 23<sup>rd</sup> of January, 2019 as part of WiSTEM.<sub>Gh</sub> mission to inspire, motivate, mentor and maintain the next generation of Women in STEM Careers. The purpose of the visit was to encourage and initiate WiSTEM.<sub>Gh</sub> Sunyani chapter.

#### Collaborations

- WISTEM.<sub>cb</sub> has had a number of collaborations including:
- Millennium Development Authority (MiDA) on the Ghana MiDA Internship and Mentoring programme
- Kumasi Hive and GIZ on the Republica, Kumasi Edition
- Gh. Scientific and Ghana Neuroscience Society on the Neurogirl Campaign
- Developers in Vogue, SHE Digital and SCISA Women's Commissioner on 'Her Journey'
- Vodafone Ghana and the WiSTEM female Postgraduate mentorship programme
- Global Sharpers Kumasi Hub for counseling and mentoring of first and second cycle schools
- Women's Commission GRASSAG KNUST on 'Opportunities in WiSTEM'

#### UPCOMING ACTIVITY Girls Camp 2019

Following the remarkable success chalked by the maiden girls' camp, the 2019, WISTEM.<sub>Gh</sub> 'STEM girls camp' is proposed as a scale up edition to accommodate a total of 200 girls from 20 selected participating second cycle schools within the Ashanti region of Ghana. This edition is particularly

targeted at girls from less endowed schools with an expected representation of 120 girls (60%). The critical aim is to create equal opportunity for all girls, provide improved learning opportunities and outcomes and ultimately to boost their interest in STEM education.



**Officials at the WiSTEM launch** 



The VC of KNUST at the Girls Camp



International Year of the Periodic Table



WiSTEM Visits UENR



WiSTEM Visits St Monica's SHS



Mentoring and Leadership Workshop at St.Louis SHS



MiDA Internship and Mentoring 2018



Practical Sessions at the Neurogirl event



A cross-section of participants at the Official Launch of WiSTEM. GH

# **INSTITUTE OF DISTANCE LEARNING (IDL)**

#### INTRODUCTION

The Institute of Distance Learning (IDL) exists to provide a viable complement to the traditional mode of university education. The Institute provides this alternative in a flexible distance learning mode through its state-of-the-art e-learning, virtual classroom platforms and periodic face-to-face sessions that allow its students to fit their study around work, social and family commitments.

By doing so, IDL is helping to expand access to quality science and technology education at both the graduate and undergraduate levels of the country's educational system. Majority of IDL students are professionals and practitioners seeking executive, management, promotional or transitional opportunities in their places of work.

#### STAFFING

#### The Institute is managed by:

Professor K. O. Boateng	Director
Dr. Ahmed Agyapong	Deputy Director
Mr. M. K. Okrah	Registrar
Mr. Charles Nsiah	Accountant
Mr. J. T. Abaitey	Internal Auditor
Dr. C. K. Osei	Senior Research Fellow
Mr. Christopher Addo	Assistant Registrar (CELT)
Mrs. Maurin E. Odai	Midland Zonal Co-ordinator
Mrs. Joy S. A. Amakwaa	Southern Zonal Co-ordinator
Mr. Seth K. Nkrumah	Southern Zonal Co-ordinator
Mr. Emmanuel Opintan-Baah	Western Zonal Co-ordinator
Mr. Yin Anaab-Mukasa	Northern Zonal Co-ordinator
Mr. Abraham Adusei	Junior Assistant Registrar

In addition, there are a number of support staff who assist with the day-to-day activities of the Institute.

The Institute uses the services of highly-qualified and motivated Facilitators who are mainly KNUST academic staff. Industrial Experts complement KNUST staff in facilitating programmes on offer at the various Centres across the country.

#### ACADEMIC PROGRAMMES

In the 2018/2019 academic year, the Institute, (through the various Departments of the University) offered the following programmes:

SN	NAME OF PROGRAMME
	TWO-YEARS UNDERGRADUATE DIPLOMA PROGRAMMES
1	Diploma in Architectural Technology
2	Diploma in Business Administration
3	Diploma in Information Technology

4	Diploma in Horticulture
5	Diploma in Disability and Rehabilitation Studies
6	Diploma in Mechanical Engineering
7	Diploma in Computer Network Engineering
8	Diploma in Computational Data Analysis for Business and Finance
	TWO-YEARS TOP-UP UNDERGRADUATE DEGREE PROGRAMMES
9	BSc. Quantity Surveying and Construction Economics (QSCE)
10	BSc. Construction Technology and Management (CTM)
11	BSc. Statistics
12	B.A. Social Work
13	BSc. Information Technology (BIT)
14	BSc. Actuarial Science
15	B.A. Sociology
16	BSc. Agriculture
17	BSc. Computer Science
	BSc. Business Administration with Options in Human Resource Management, General
18	Management, Accounting, Banking and Finance, Marketing, Hospitality Management,
	Logistics and Supply Chain Management.
	TWO AND HALF YEAR TOP-UP UNDERGRADUATE DEGREE PROGRAMMES
19	BSc. Computer Engineering
20	BSc. Electrical and Electronic Engineering
21	BSc. Mechanical Engineering
22	BSc. Geomatic Engineering
23	BSc. Agricultural Engineering
24	BSc. Petroleum Engineering
25	BSc. Civil Engineering
26	BSc. Chemical Engineering
	POSTGRADUATE DEGREE PROGRAMMES
27	MSc. Industrial Finance and Investment
28	MSc. Logistics and Supply Chain Management
29	MSc. Procurement and Supply Chain Management
30	MSc. Accounting and Finance
31	MSc. Economics
32	MSc. Health Informatics
33	MSc. Information Technology
34	MSc. Project Management (Accra, Takoradi & Tamale Centres Only)
35	MSc. Business Consulting and Enterprise Risk Management
36	MSc. Educational Innovation and Leadership Science
36 37	MSc. Educational Innovation and Leadership Science MSc. Technology Management and Entrepreneurship
	MSc. Educational Innovation and Leadership Science

	MSc. Applied Statistics
41	MSc. Human Nutrition and Dietetics
42	MSc Food Quality Management
43	MSc. Development Management
44	MSc. Environmental Science
45	M.A. Sociology
46	Master of Public Administration (MPA)
47	Master of Education (MEd)
48	MSc. Security and Justice Administration
49	MSc. Energy and Sustainable Management
50	MSc. Packaging Technology and Management
51	MSc. Tourism and Hospitality Management
52	MSc. Strategic Management and Leadership
53	MSc. Funds and Portfolio Management
54	MSc. Insurance and Business Continuity
55	MSc. Agribusiness Management
56	MSc. Mechanical Engineering
57	MSc. Geo-Information Science for Natural Resources Management
58	MSc. Development Finance
59	MSc. Biotechnology
60	MSc. Forensic Science
61	MSc. Disability, Rehabilitation & Development Studies
62	MBA International Business
63	MPhil. Post-Harvest Technology (Horticulture)
64	MPhil. Forensic Science
65	MPhil. Political Studies
66	Commonwealth Executive Master of Business Administration (CEMBA)
67	Commonwealth Executive Master of Public Administration (CEMPA)
	MBA Specialisation (for CEMBA/CEMPA Graduates Only) with options in Logistics
68	and Supply Chain Management, Human Resource Management, Finance, Accounting, Marketing and International Business
	Professional Master of Engineering with Management (MEng) with options in Oil and
(0	Gas (Mid and Downstream), Industrial Operations, Building Services Engineering, Energy
69	Systems Engineering, Municipal Engineering and Information and Communication

The Institute in collaboration with the Department of Nursing, KNUST organised access courses in Elective Mathematics, Physics, Chemistry, Biology, Core Mathematics and English Language for health professionals who desire to further their education but have deficiencies in the above subjects. This was carried out in all the Institute's Regional Centres.

In the 2019/2020 academic year, the Institute plans to introduce an MSc in Planning, Monitoring and Evaluation as well as other undergraduate and postgraduate programmes. Plans are also underway to create platforms for distance learning students to write examinations online through the use of appropriate educational technology.

# **LEARNING CENTRES**

The Institute has learning centres across the country namely Kumasi, Sunyani, Tamale, Bolgatanga, Wa, Koforidua, Ho, Accra, Tema, Takoradi and Cape Coast. These Centres are manned by Zonal Co-ordinators, assisted by part-time Centre Co-ordinators.

Plans are underway to have a KNUST-owned learning facility in all the Centres since most of its regional learning centres are housed in rented premises. Thus far, facilities in Kansaworado (Sekondi-Takoradi) and Kwabenya (Accra) have been completed and are in use while facilities at Tamale and Moree (Cape Coast) are nearing completion.

The Kumasi Centre, which serves as the central co-ordination unit of IDL's activities has a stateof-the-art Conference Centre with 40-seater syndicate room, a 50-seater telepresence room, 120-seater conference room (with WiFi and stand-by generator), an e-learning centre with stateof-the-art recording studios (for the recording of lectures) and a 100-seater computer room for practical teaching and learning.

# STUDENT POPULATION

The Institute in the 2018/2019 academic year had a student population of **9,901** made up of 5,547 undergraduate and Diploma students and 4,354 postgraduate students.

# **ACTIVITIES IN THE YEAR**

In pursuit of its vision to be the "leading Institute in providing access to continuing and tertiary education/ training through distance learning in Africa", several programmes and projects were undertaken in the course of the year. Among these were:

- Research management seminar organised for staff of nine Technical Universities to equip them with requisite skills in the area of promotion of knowledge.
- Seminar on Cyber Security threats for students undertaking programmes in Security and Justice Administration, Management Information System and Cyber Security and Digital Forensics. This was done in collaboration with the Headquarters of the Criminal Investigations Department (CID) of the Ghana Police Service.

The Institute also hosted a delegation from the Ghana Revenue Authority for discussions on institutional partnership.

As part of their social enterprise project, the Development Management programme organised a workshop which created the platform for students to present some identified problems and how such problems could be resolved.

Further details on the Institute and its programmes can be obtained from https://idl.knust.edu.gh/

# INTERNATIONAL PROGRAMMES OFFICE

#### **INTRODUCTION:**

In the year under review, The International Programmes Office (IPO) continued to engage its stakeholders (Colleges, Faculties and Departments) in a number of activities that strengthened existing collaborations as well as initiate new ones.

#### **STAFFING**

The office is manned by the following

Dean Prof. R. Assasie Oppong

Senior Assistant Registrar Mrs Gladys Addai

These two senior members of staff are supported by a Senior Administrative Assistant, a casual staff, service persons and a driver.

# AGREEMENT AND MEMORANDA OF UNDERSTANDING SIGNED

During the year under review, KNUST and a number of universities in Asia, Europe, Northern and Southern America and Africa signed academic collaboration agreements as well as Memoranda of Understanding. These universities/institutions and organisations are as follows:

## Signed MOUs since June, 2018 to date

- Czech Technical University in Prague-Czech Republic
- Media 7 Limited (Media 7)
- University of Guelph, Canada
- University of Saint Joseph, USA
- Arizona State University
- Spectrahealth Imaging and Interventional Radiology
- University of KwaZulu-Natal
- New Mexico Institute of Mining and Technology
- Hochschule Trier, Umwelt-Campus Birkenfeld, Germany
- University of Sierra Leone
- Hacklab Foundation
- HPW Fresh and Dry Limited
- Ghana Publishing Company Limited
- The French Embassy in Ghana
- Sewerage Systems Ghana Limited
- University of Makeni, Sierra Leone
- Université Paris-Saclay, France
- University of Cape Coast
- Ulsan National Institute of Science and Technology (UNIST), Republic of Korea
- University College of Northern Denmark
- University of East Anglia, UK
- Ecole supérieure Polytechnique de Kaya, Burkina Faso
- Edinburgh Napier University, UK

- The University of Newcastle, Australia
- Lingnan University, Hon Kong and
- EPF Ecole D'Ingénieur-e-s (Sceaux), France
- University of Rosario of Columbia
- Intravenous Infusions Limited

#### These MOU's will be signed soon:

- Eridec Ghana Ltd.
- Linnaeus University, Sweden
- Richie Plantations Ltd
- University of South Africa
- Zhengzhou University, P. R. China
- Hokkaido University, Japan
- Scania West Africa Ltd, Accra
- The University of Campania Luigi Vanvitelli, Italy
- Njala University, Sierra Leone
- University of The Gambia
- Universität Hamburg Centre for Natural History (CENAK), Germany
- Stellenbosch University, South Africa
- Institut d'Enseignement Supérieur de Ruhengeri, Rwanda
- Forestry Research Institute of Nigeria (FRIN)

An MOU with international institutions supporting the MSc. Mental Health Policy, Services and Development Programme will also be signed soon.

# INTERNATIONAL STAFF AND STUDENTS EXCHANGES IN THE 2018/2019 ACADEMIC YEAR

Ninety-nine (99) staff/students were received at KNUST for a semester/year study during the 2018/2019 academic year. It must however be noted that, there could have been other exchange students and staff on campus whose admissions and engagements might have been handled at the department and faculty levels without any recourse to the IPO.

# **VISITING STAFF TO KNUST**

- State University of New York at Geneseo (SUNY) Based on the Memorandum of Understanding signed between KNUST and State University of New York, Geneseo (SUNY), a nine (9) member educationist delegation from SUNY, USA led by Dr. Crystal Simmons visited the University from 14<sup>th</sup> November to 17<sup>th</sup> December, 2018. They carried out their teaching activities at the KNUST Basic Schools and others had classroom experience at the Colleges.
- Study Abroad Students to KNUST from USA/Germany/France/Netherlands Due to the Memorandum of Understanding between KNUST and UNIST, eight students and a staff member of UNIST were invited to the University for an exchange programme with the College of Engineering from 4<sup>th</sup> to 25<sup>th</sup> August, 2018.

- i. Misses Alina Jazzy Braun and Alexsa Rajasingam, students from Frankfurt University of Applied Sciences, Germany were received at the Department of Sociology and Social Work, Faculty of Social Sciences, to join the second year B.A. Social Work Degree Programme in the first semester of the 2018/2019 academic year. Mr. Sascha Wellmann, a student from Hochschule Darmstadt University of Applied Sciences, Germany also joined the third year B.A. Social Work Degree Programme during the 2018/2019 academic year.
- ii .A delegation of four led by Vice-President Professor Juliane Winkelmann from the Technical University of Munich, Germany, visited the University from 18<sup>th</sup> to 20<sup>th</sup> October, 2018 to commence KNUST-TUM flagship Initiative for Sustainable Development.
- iii. IPO on behalf of University received a seven (7) member team from some higher educational institutions in Germany on November 30. This was sponsored by Baden-Württemberg International (bw-i), an internationalisation agency of Germany's biggest Federal state. Their mission was to find potential Ghanaian partners for cooperation projects.
- iv. Misses Sasha Haasnoot, Laura Schepens, Charlotte Pistor and Jasmine Van Schaih; students from University of Applied Sciences, Leiden, the Netherlands, had three (3) months internship attachment at the Centre for Disability and Rehabilitation Studies from 1<sup>st</sup> October to 22<sup>nd</sup> December, 2018.
- v. Mr. Constantin Von Rosenschild, student from École Nationale Supérieure des Beaux-Arts de Paris (ENSBA) – France, was received as an exchange student for the second semester of the 2018/2019 at the Department of Painting and Sculpture, KNUST for a semester's Master's Programme.
- vi. The University received a group of twenty-six (26), made up of students, administrators and faculty members from Ramapo College of New Jersey for student leadership and administrative exchange programme from 11<sup>th</sup> to 25<sup>th</sup> March, 2019.
- vii. KNUST received eighteen (18) students and five (5) faculty members from South Dakota State University (SDSU) from 5<sup>th</sup> to 18<sup>th</sup> May, 2019 for a student exchange programme.
- viii. Another group of eleven (11) nursing students and three (3) faculty members were received from Ramapo College of New Jersey, USA, for an exchange programme with the Department of Nursing from 20<sup>th</sup> May to 4<sup>th</sup> June, 2019.

# KNUST STAFF AND STUDENTS EXCHANGES IN THE 2018/19 ACADEMIC YEAR

#### **KNUST Staff to Partner Institutions**

- CIRCLE Case Study Visit Nigeria
   The Climate Impact Research Capacity Leadership Enhancement Programme (CIRCLE)
   invited Dr. Philip Antwi-Agyei, Senior Lecturer at the Department of Environmental Science
   to represent the Dean of IPO at an Institutional Strengthening Programme (ISP) Case
   Study Visit organized by CIRCLE at the University of Port Harcourt, Nigeria from 5<sup>th</sup> to
   8<sup>th</sup> December, 2018.
- Visit to Technical University of Munich (TUM) The Erasmus+ Mobility for Staff training or teaching granted Prof. Rexford Assasie Oppong, Dean of IPO the Mobility Award together with Dr. Emmanuel Kwame Appiah-Adjei, Lecturer, Department of Geological Engineering and Mr. Debrah Owusu Ansah, College Registrar, College of Agriculture and Natural Resources, to visit the Technical University of Munich (TUM), Germany from 18<sup>th</sup> to 22<sup>nd</sup> March, 2019.
- Madonna University
   Eight (8) selected Senior Members of the Faculty of Pharmacy and Pharmaceutical Sciences
   were invited by Madonna University, Nigeria, for an academic interaction with staff and
   students of the Faculty of Pharmacy, Madonna University from 12<sup>th</sup> to 26<sup>th</sup> January, 2019.

Staff Visit to Ramapo College of New Jersey A delegation made up of Prof. Wilson Agyei Agyari, Dean of Students, Mrs. Gladys Addai, Senior Assistant Registrar, IPO and Ms. Efua Arku, Assistant Registrar, Office of the Vice-Chancellor made a follow-up visit to Ramapo College of New Jersey, USA from 25<sup>th</sup> May to 5<sup>th</sup> June, 2019. They met relevant administrators of Ramapo College and discussions were held on joint collaborative projects and knowledge expansion in the area of international education and administration.

# SCHOLARSHIPS OFFERED WITH RESPECT TO SIGNED MEMORANDA OF UNDERSTANDING/ ACADEMIC AGREEMENTS

In line with the implementation of Memoranda of Understanding and Academic collaborations signed with partner institutions in Europe, North America, Asia and Africa; KNUST staff and students were offered the following Scholarships/Grant during the 2018/2019 academic year.

i. Erasmus +/DAAD - Technical University of Munich (TUM)

The partnership of KNUST and the Technical University of Munich continues to grow with students winning Erasmus +/DAAD grants/scholarships. Two students, Messrs. Emmanuel Banahene Owusu and Dickson Asante Armah who are pursing MPhil Architecture and MSc Geophysical Engineering participated in the Erasmus+/DAAD programmes at the Technical University of Munich (TUM). Their scholarship which was from October 1<sup>st</sup>, 2018 to March, 31<sup>st</sup> 2019 was worth \$11,240.00.

ii. ACU Scholarship Nomination to University of Malta

Due to the collaboration between Association of Commonwealth Universities (ACU) and KNUST, an opportunity was given KNUST through the IPO to nominate two students to study in the University of Malta. Miss Amoapong Sikadwa Badu Prempeh was granted the scholarship to study MSc. Biology from 2019 to 2021.

iii. Summer School programme at Hochshule Darmstadt University of Applied Sciences

Two (2) level 300 BA Social Work students were selected to participate in the Summer School programme at Hochshule Darmstadt University of Applied Sciences, Darmstadt Germany from 9<sup>th</sup> to 20<sup>th</sup> May, 2018. The students were Miss Rakibu Crispin Mbamba and Mr. Michael Oboh. They have since returned. The scholarship was sponsored by DAAD.

iv. Another student, Mr. Laud Adjetey a level 300 student on the BA Social Work Programme is currently in Darmstadt for the same programme. His programme will run from 1<sup>st</sup> March, 2019 to 31<sup>st</sup> July, 2019.

# SCHOLARSHIPS OFFERED TO INTERNATIONAL STUDENTS TO STUDY AT KNUST

- Association of Commonwealth Universities Scholarship 2018-2020 KNUST under the Association of Commonwealth Universities scholarship admitted Mr. Hilary Kibele Harawo from Kenya to the MSc. Disability, Rehabilitation & Development programme and Miss Engonwie Sharon Mbachan from Cameroon to the MPhil. Agricultural Engineering programme. Each programme is a two (2) year programme and started at the beginning of the 2018/2019 academic year. They were awarded a total amount of Twenty-Three Thousand, Six Hundred and Twenty-Two Dollars (\$23, 622.00) to cover yearly stipend, accommodation, tuition and other related costs.
- KNUST continues to receive international recognition and attraction. Two hundred and forty-eight international applications were received for the Commonwealth Scholarship to study in KNUST for the 2019/2020 academic year. Unfortunately, the Commonwealth Secretariat could sponsor only two out of the number to pursue MPhil. Pharmaceutical

Chemistry and MSc Clinical Pharmacology programmes from 2019 to 2021. They are Mr. Gideon Onuh and Mr Miracle Emosivbe, both from Nigeria.

#### INSTITUTIONAL AND ORGANIZATIONAL VISITS TO KNUST

The office received delegations from the under listed institutions. The purpose of most of these visits were to seek collaboration between KNUST and their Institutions and also to strengthen existing ones

NO.	COLLABORATING UNIVERSITY	COUNTRY
1	South Dakota State University	USA
2	SUNY Geneseo, Geneseo, NY,	USA
3	Auburn University	USA
4	Iowa State University	USA
5	Technical University of Munich	Germany
6	University of Bonn	Germany
7	Lunde University	Sweden
8	Ulsan Institute of Science and Technology	South Korea
9	University of Makeni	Sierra Leone
10	University of Agriculture	Sierra Leone
11	Kyambogo University	Uganda
12	University of Ghana	Ghana

# SUMMARY OF ACTIVITIES FOR 2018/2019 ACADEMIC YEAR

- Major activities undertaken by the office during the year under review include
- Establishing of Memoranda of Understanding/Academic cooperation with international institutions in collaboration with the Provosts of Colleges and Deans of Faculties.
- Handling agreements involving the University and its collaborators or partners in respect of external academic programmes in conjunction with the Registrar's Office.
- Hosting of Commonwealth Scholarship beneficiaries to KNUST every year.
- Facilitating the various Universities Scholarships to Staff, Students and Teaching Assistants of the University.
- Facilitating the annual Bank of America Merrill Lynch Career Workshop for KNUST students.
- Coordinating the registration of KNUST students for ACE Consult's GRE/GMAT/TOFEL classes.
- Coordinating Erasmus + programme between KNUST and other institutions.
- Advertising of scholarships to the University community.

# CONCLUSION

The International Programmes Office still has challenges with transportation and accommodation of large number of exchange students and visitors. In spite of these challenges, the Office is still pursuing its mandate of fostering collaborations with institutions that have similar focus both nationally and internationally.

# **OFFICE OF GRANTS AND RESEARCH**

# INTRODUCTION

The Office of Grants and Research (OGR) continues to deliver on its mandate of providing Research and Grant administration support services to sponsored research activities in KNUST. The office provides pre and post-award support to staff engaged in research projects, administers the University's Research Fund, promotes the dissemination of the University's research outputs and undertakes capacity building activities relating to research and grantsmanship.

# STAFF

The following constitute the staff of the Office:

Professor Robert Clement Abaidoo – **Director** Mrs. Amanda Owusu Asare – **Assistant Registrar** Mr. Edward Abeku Ampah – **Senior Administrative Assistant** Mr. Emmanuel Ebo Ocran – **Accounts Officer** Ms. Nadia Tagoe – **Assistant Registrar (On Study leave)** 

#### ACTIVITIES OF THE OFFICE Management of KNUST Research Fund (KReF)

The purpose of the KReF is to stimulate research and build capacity of staff and departments in grant proposal writing. It also seeks to encourage interdisciplinary research among staff, and enhance collaboration and linkages among disciplines within the University as well as external partners for the socio-economic development of Ghana in particular and Africa in general. The KReF's main focus is to support applied, problem solving and interdisciplinary research. It also seeks to prepare beneficiaries with writing skill to prepare proposals for external grants.

The KNUST Research Fund (KReF) which was established in 2015 has successfully awarded grants amounting to Four Hundred and Seventy-Two Thousand, Eight Hundred and Eighty-Four Cedis, Ninety-Six Pesewas (GH¢ 472,884.96) in the 4<sup>th</sup> KReF. The number of awardees (ie. 22 awardees in KReF 4) was almost double that of KReF 3 which had 13 awardees. The awards cover both seed and interdisciplinary research in the six Colleges; namely College of Art and Built Environment, College of Agriculture and Natural Resources, College of Health Sciences, College of Humanities and Social Sciences, College of Engineering and College of Science. Out of the 45 proposals received in 2018, twenty-two (22) applicants were successfully awarded as given per Table 1.

		COLLEGE	COLLEGE OF ART AND BUILT ENVIRONMENT	
No.	KReF Applicants	Department	Title	Amount
Grant Typ	Grant Type: Multidisciplinary			
	Dr. Owusu Amponsah	Planning	Ghana's Biofuel Investment Policy: An Inducer or Barrier to Sustainable Livelihoods in Poverty Stricken Rural Communities	GH¢ 29,964.00
	Dr. Stephen Appiah Takyi	Planning	Urbanizing with Nature: An Assessment of the Effects of Human Activities on Water Bodies in the Kumasi Metropolis	GH¢ 29,300.00
<b>Grant Type: Seed</b>	e: Seed			
3.	Dr. Emmanuel Adinyira	Building Technology	Systems Modelling of Risks to International Construction Joint Ventures (ICJVs) in Ghana	GH¢ 10,000.00
Subtotal:				GH¢ 69,264.00
		COLLEGE OF AGF	COLLEGE OF AGRICULTURE AND NATURAL RESOURCES	
Grant Typ	Grant Type: Multidisciplinary			
			Development of Climate Smart Chickens: Molecular Genotyping of Naked Neck	
4.	Dr. Kwaku Adomako	Animal Science	and Frizzle Chickens	ULL 20,000.00
<b>Grant Type: Seed</b>	e: Seed			
5.	Dr. Samuel Boadi,	Social Forestry	Oil Palm Mushroom (Volvariella volvacea) Spawn Production	GH¢ 10,000.00
	Prof. Boateng Kyereh			
6.		Silviculture and Forest Management	Cloning And Early Growth Studies of Male Broussonetia Papyrifera Plants For Rehabilitation	GH¢ 10,000.00
Subtotal:				GH¢ 50,000.00
		COLI	COLLEGE OF HEALTH SCIENCES	
No.	KReF Applicants	Department	Title	Amount
Grant Type	Grant Type: Multidisciplinary			
Д.	Dr. Gustav Komlaga	Pharmacognosy	Formulation of Standardized Herbal Antimalarial Products from Validated Medicinal Plants	GH¢ 30,000.00

σċ	Dr. (Mrs.) Cynthia Amaning Danqua	Pharmacology	Screening of Ghanaian Allium Species for Antimycobacterial, Efflux Pump And Biofilm Inhibitory Activity to Mitigate Multidrug Resistant Tuberculosis.	GH¢ 29,998.80
હ	Dr. Eric Boakye-Gyasi	Pharmacology	Herbal Medicine Use And Kidney Failure: Are Ghanaian Medicinal Plants Implicated?	GH¢ 30, 000.00
<b>Grant Type: Seed</b>	e: Seed			
10.	Dr. (Mrs.) Cynthia Amaning Danquah	Pharmacology	Application of the Rapid, Simple, Inexpensive High-Throughput Spot Culture Growth Inhibition Assay (HT-Spoti) in Natural Product Drug Discovery to Tackle Antibiotic Resistance In Global Infectious Diseases.	GH¢ 10,000.00
11.	Dr (Mrs ) Afia Frimpomaa Asare Marfo	Pharmacy Practice	Workplace Detection and Management Of Hypertension In the Faculty of Pharmacy And Pharmaceutical Sciences KNUST	GH¢ 10,000.00
12.	Dr. Michael Owusu	Medical Labratory Technology	Chromosomal and Plasmid Mediated Fluoroquinolone Resistance In Human Salmonella Enterica Infection in Ghana	GH¢ 9,950.00
13.	Dr. George Kwaw Ainooson	Pharmacology	Developing Rapid and Robust Toxicological Screening Models in Zebrafish	GH¢ 9,930.96
14.	Dr. Mohammed Mutocheluh	Clinical Microbiology	Assessing the Serological and Molecular Evidence of Chikungunya Viral Infection among Presumptively Diagnosed Malaria Patients In Ghana.	GH¢ 10,000.00
Subtotal:				GH¢ 139,879.76
		COLLEGE OF H	COLLEGE OF HUMANITIES AND SOCIAL SCIENCES	
No.	KReF Applicants	Department	Title	Amount
Grant Typ	Grant Type: Multidisciplinary			
15.	Dr. George M. Bob- Milliar	History & Political Studies	Institutional Trust in Ghana	GH¢ 30,000.00
16.	Dr. Kwadwo Ofori-Dua Snr	Sociology and Social Work	Improving Access to Health and Social inclusion for the intellectually disabled in Ghana	GH¢ 30,000.00
Grant Type: Seed	e: Seed			

17.	Dr. Justice Richard Kwabena Owusu Kyei	Sociology and Social Work	Suicide Ideation among University Students: A Case of Students in Kwame Nkrumah University of Science and Technology, Kumasi	GH¢ 9,955.00
Sub Total:				GH¢ 69,955.00
		C	COLLEGE OF ENGINEERING	
Grant Typ	Grant Type: Multidisciplinary			
18.	Dr. Emmanuel Wendsongre RAMDE	Mechanical Engineering / The Brew Hammond Energy Centre	Optimization of a Solar Tracking System for a Piloted Concentrating Solar Power Plant	GH¢ 28,800.00
19.	Dr. Richard Opoku	Mechanical Engineering	Towards Ghana's Green Energy Future - Reducing Electricity Wastage in Offices Associated with Air-Conditioners during Non-Occupancy Hours	GH¢ 29,425.00
20.	Prof. Kwame Osei Boateng	Computer Engineering,	An Intelligent Embedded System Device for The Non-Destructive Detection of Cracks In Engine Crankshafts Using Audible Sound	GH¢ 25,561.20
Subtotal:				GH¢ 83,786.20
COLLEGE				
OF				
No.	KReF Applicants	Department	Title	Amount
Grant Typ	Grant Type: Multidisciplinary			
21.	Dr. Kingsley Badu	Theoretical and Applied Biology	Cutaneous Leishmaniasis In Ghana :Validation Of Novel Diagnostic Biomarkers for Vector Incrimination and Determination Of Spatio-Temporal Transmission Dynamics	GH¢ 30,000.00
22.	Dr. Lawrence Sheringham Borquaye,	Chemistry	Pharmaceutical Residues in Selected Surface Water Bodies and Drinking Water in Kumasi	GH¢ 30,000.00
<b>Grant Type: Seed</b>	e: Seed			
Sub Total:				GH¢ 60,000.00
TOTAL				стл 884.96
				4/2,004.70

#### Monitoring of KReF Supported Research Table 2: Research Outputs of some KReF 3 Projects

Project Title	Title of Manuscript	Journal Published In
Mobilisation of Internally Generated Funds (IGF) by Metropolitan, Municipal and District Assemblies (MMDAs) in	Mobilising Internally Generated Fund (IGF) within Decentralised Governace – Possible Impossibility in Ghana's Local Government System Structures and Approaches to	Public Policy and Administration Review
Ghana	Fiscal Decentralisation in Peri – Urban Municipalities around Accra, Ghana	Journal of Economic Policy Reform
Development of Okra pectin as a drug release modifier and matrix for controlled release drug delivery of metformin in the management of chronic diabetes	Okra pectin as drug control – releasing polymer; a study of pectin polymers from 6 different genotypes of Okra (Abelmoschus esculentus L)	Elsevier Conference
Motor Vehicles	Naturalized and invasive	Springer
as a potential Pathway of invasive plants introduction: Example from Ghana's land broders	alien flora of Ghana	https://doi.org/10.1007/s10530- 018-1860-7

#### INVITATIONS

The Office was invited to participate in a number of events. Some of these events required inputs from the Office to ensure the success of the activities. Key among them are listed below:

- i. Green Entrepreneurship awards ceremony 5<sup>th</sup> July, 2018 at KNUST
- ii. USAID Analytical Support Services and Evaluation for Sustainable Systems (ASSESS) Project, West Africa – 1<sup>st</sup> August 2018 at KNUST
- ii. Arizona State University (ASU) Symposium

# FUNDER REGISTRATIONS

Renewal of existing funder registration were carried out by the Office to ensure that institutional registrations remained active. Records of all registrations are managed at the Office and staff continued to access these for use during grant applications. The University has the following active registrations on funder systems.

System/Registration	Funding Agency	
Data Universal Numbering System (DUNS)	USA National Institutes of Health (NIH)	
Grants.gov	USA National Institutes of Health (NIH)	
Sam.gov (formerly CCR)	USA National Institutes of Health (NIH)	
eRA Commons	USA National Institutes of Health (NIH)	
NSF Fastlane	National Science Foundation	
eGrant System	Wellcome Trust	
Joint Electronic Submission (Je-S) System	Research Councils UK	
Potential Applicant Data Online Registration	European Commission	
(PADOR)		
Participant Identification Code (PIC)	European Commission	

#### Support for Proposal Development and Award Management

In the year under review, a number of services were rendered to researchers who needed assistance through the various stages in the grant cycle. The Research supports services accessed by our clients included dissemination of funding opportunities, proposal advisory services and development, proposal submission assistance, processing of grants sub-contracts and provision of resources to support applications. The Office also worked with staff to apply for various funding from funding agencies including the World Bank, National Institute of Health, Wellcome Trust, European Union and DANIDA.

#### Table 4 provides breakdown of the services regarding grant applications.

Table 4: Breakdown of services regarding grant applications

Service Rendered	Number
Sub Consultancy Agreement	1
Research Sub Award Agreement	2
Proposal Development Assistance and Review	8
Letter of Support	33
Letter of Collaboration	7
Request for Partnership	32
Letter of Intent	2
Letter of Commitment	2
Ethical Clearance	3
Survey Questionnaire	3
Funder Registration ID Request	7
Sample budget Lines & Other Budget Related Issues	8

Name	Projects	Sponsor	Amount
Dr. Charles Adams	Ace Regional Transport Research Centre, Kumasi	World Bank	8.96 million USD
Prof. Samuel Nii Odai	Regional Water and Environmental Sanitation Centre Kumasi (RWESCK)	World Bank	7.7 million USD
Prof. Kwabena Biritwum Nyarko	Ghana College of Engineering Strengthening	World Bank	7.7 million USD
Prof. Plange Rhule	Uptake of task-shifting strategy for blood pressure control in community health planning services	National Institute Health (NIH)	281,800.00 USD
Dr. Veronica Dzomeku	Changing the culture of disrespect and abuse in maternity care in Kumasi, Ghana	National Institute Health (NIH)	86,584.00 USD
Dr. Samuel Akomea	Transforming weather water data into value added services for sustainable growth in Africa	EU Horizon 2020	118,950.00 EUROS
Dr. Samuel Akomea	E-transform project(for the implementation of an innovation hub at Kumasi Business Incubator	World Bank	118,950.00 EUROS
Prof. J. T. Bugri	Strengthening advisory capacity for land governance in Africa (SLGA)	German Government	230,000.00 USD
Prof. Raphael Folitse	Technical backstopping to control foot and mouth disease	United States Department of Agriculture	75,000.00 USD
Dr. Fred Stephen Sarfo	Addressing hypertension care in Africa	John Hopkins University USA	107,710.00 USD
Prof. Ellis Owusu Dabo	Effect of a novel typhoid conjugate vaccine in Africa: a multicentre study in Ghana and the Democratic Republic of Congo (Desca)	EU Horizon 2020	5 million EUROS
Prof. Ellis Owusu Dabo	Sickle gene Africa	National Institute of Health H3 AFRICA BIONET	329,080.00 USD

Table 5: List of Key projects that were running in the year under review

Dr. Mrs Eunice Akyereko Adjei	Implementation of bio-rural energy scheme for Ghana	Global Challenge Research Fund (GCRF)	75,749.00 GBP
Prof Emmanuel Addo-Yebo	Improving asthma outcomes in African children	Queen Mary University, UK	215,094.50 GBP
Prof. William Oduro	Enhancing entrepreneurship, innovation and sustainability in higher education in Africa	EU Horizon 2020	120,000 EUROS
Dr. Kingsley Badu	An infectious bite marker for sensitive malaria detection and population level surveillance	European Union	144,500.00 EUROS
Dr. Jacob Hamidu	Development of module on hatchery management for increased productivity in the poultry sector' in Ghana	Skills Development Fund (SDF)	383,452.00 GHC

# **GUIDELINES, POLICIES AND SOP's**

In line with OGR's effort to enhance research work at the University, Guidelines, Policies and Standard Operating Procedures (SOP's) are being constantly developed. The year under review saw two (2) polices being approved and others at various stages of development.

#### **Approved Policies**

- i. indirect Cost Rate
- ii. Efforts and Compensation Policy

#### **Draft Policies**

- i. Guidelines and Procedures on Concept Note and Proposal Development
- ii .A Principal Investigator's Handbook for Grants and Research
- iii. Policy and Procedures for Research Project Close-Out
- iv. Proposal and Grant Award Acceptance and Registration Policy

# **COLLEGES GRANTS AND RESEARCH OFFICES**

The OGR satellite offices at the six Colleges also continued to render support to staff, bringing the research administration services much closer to the Colleges.

# **STAFF TRAINING**

Training sessions for staff included those organized solely by OGR and others in collaboration with some project partners. These sessions were organized to give participants the opportunity to learn about the administrative aspects of Proposal development. Seminars were held for researchers, research administrators and accounting staff on Research Proposal Writing, Reviewing of Research Grant Proposals and Grantsmanship. In addition, periodical in-house training sessions were organized for the College Research Administrators to build their capacity to better serve the researchers at their Colleges.

# **OPPORTUNITIES**

The OGR has the potential to expand with the institutionalization of the 2 research management systems (Research Management Information System – ReMIS and Grants Accounting Management System - GAMS) and the development of various research policies to standardize grant applications and their management procedures. There are also prospects with the strengthening of the College Research Administration Offices to bring the OGR services closer to the door step of the researcher. In the year under review, twenty (20) research projects and three (3) research proposals were captured in the ReMIS.

# CHALLENGES

Inadequate staff continues to pose a challenge for effective support services that the Office was designed to offer. OGR does not have enough full-time staff both at the central office and satellite offices at the college level. This makes it difficult for the Office to reduce the turnaround time (TAT) for processing applications from researchers across the University.

# **OFFICE OF THE DEAN OF STUDENTS**

## INTRODUCTION

The Office of the Dean of Students has continued to evolve and expand both in terms of human resource and infrastructure. Following the commissioning of the Office of the Dean of Students named the Harper Building, the office houses various units including the KNUST Counselling Centre (KCC), Ghana Immigration Service, Protestant Chaplaincy, Students Affairs and Students Financial Services as well as the secretariat for the MasterCard Scholars' Program (MCF). All of these units work in concert to ensure academic and general well-being of students.

The Office provides a platform for regular interaction between students' leadership, other student organizations and the University. It administratively oversees the three non-residential facilities on campus, the Otumfuo Osei-Tutu II (SRC Hostel) and Graduate Students' (GRASAG) Hostels. The Office with the assistance from the Finance Office has financial supervision and management of expenditure of the Students' Representative Council (SRC), local National Union of Ghana Students (NUGS), International Students' Association (ISA) and Graduate Students' Association of Ghana (GRASAG)-KNUST. The Office of the Dean of Students has functionally become a **Students' Integration Centre**.

#### **STAFFING**

Current staff at the Office including places under the Office's financial management (non-residential facilities, Otumfuo Osei-Tutu II Hostel, and the Graduate Students' Hostel are as follows:

Prof. Wilson Agyei Agyare	-	Dean
Dr. Otchere Addai-Mensah	-	Vice Dean
Mr. Daniel Kumi-Djan	-	Deputy Registrar

#### **Student Affairs and Students Financial Services**

Mrs. Theodora Oduro	-	Assistant Registrar
Stephen Bobie	-	Assistant Accountant

These senior members of staff are supported by one Chief Accounting Assistant, two Principal Administrative Assistants, two Principal Hall Assistants and an Administrative Assistant.

# MasterCard Foundation Program Staff (full time)

- Senior Counsellor
- Programme Manager
- Programme Officers
- Programme Assistants

The Office of the Dean of students also has different categories of staff and National service persons who help in its everyday activities.

# ORGANISATION

The Office is internally organized into several sections but also provides office spaces for a number of independent units that have close working relationship with the Office:

# **CENTRAL OFFICE ACTIVITIES**

## Relationship with Outside Bodies

The Office is the first point of call for external agencies and persons wishing to interphase with students. The Office has either directly received such organizations and individuals who come or are referred to the office by the Vice-Chancellor and other units of the University.

The Office provides opportunities for students to develop and enhance their leadership skills by involving them in decision-making processes, supporting advocacy for students and providing and engaging them in conflict resolution techniques. The Office achieves these goals by her own in house leadership programmes which are run four times in a year in collaboration with the International Leadership Foundation. The Office has also established a network and facilitates training programmes with multinational and medium size companies. Some of the cpmpanies are Unilever, British Council etc. The training programmes are done in collaboration with the centre for Business Development

# MasterCard Foundation Program

This is a 10-year programme supported by the Foundation of Canada-based credit card company MasterCard. The grant is to cater for the needs of scholars selected largely from rural deprived communities attending resource deficient schools across the African Continent.

The smooth partnership with the University has resulted in the successful recruitment of five cohorts of scholars with a current strength of 600. 50 students from cohort 1 have completed their programmes. The Secretariat continues to provide the needed administrative and students support and counselling services.

This year, a total of 100 students were recruited that formed the sixth cohort. This brings the total number of scholars to 650.

# Disability Support Service Unit

The Office over the years has played an advocacy role for students with disability and has kept a national service person with such a challenge to work in the unit as a liaison.

In the year under review, activities for students with disability included the following;

- Applications for disability bursary for members of the Students with Disability Association who did not have bursaries.
- Election of new executives for the Association.

A request made for a representation on the SRC Board is still under consideration.

# **International Students Affairs**

The growing numbers of international students requires that, sufficient attention is given to their general conduct and welfare. In the reporting year, 2018/2019, the Vice Dean of Students, who has oversight responsibility for the affairs of international students organized a special day of orientation for international students. The orientation focused on immigration laws of Ghana, residence permit acquisition and renewal processes, visa acquisition, the laws of Ghana in relation to international students and cultural sensitivity and adaptation.

# Students Leadership Affairs (SRC, NUGS and GRASAG)

The Office works with the leadership of the central student body of SRC and GRASAG as well as their wings to ensure their aspirations are effectively aligned with the philosophy of the University.

The Dean of Students coordinated and provided logistical support for this year's SRC and GRASAG biometric elections that passed off peacefully.

# **Students Housing and Residential Life**

The unit plays a pivotal role in the management of the Otumfuo Osei-Tutu II Hostel, with the support of the SRC leadership as well as the Graduate Students' Hostel.

The unit continued to work with private hostel owners to ensure the safety and welfare of nonresidential students of the University. The Office has put in place a Non-Residential students' desk to keep track of all non-residential students.

The Office of the Dean of Students liaised with hostels in and around campus to foster a common standard of operations. In February, 2019, the Office, through its Housing Unit, in conjunction with the Ghana Tourism Authority, Ghana National Fire Service, Ghana Police Service, the Security Services Unit of the University and the Students Representative Council, undertook a three-day inspection exercise on hostel facilities within and outside KNUST. The goal was to ensure students' safety and maintain some general and acceptable accommodation standards. This was also to ascertain information which would be relevant to recommending a list of approved hostels to guide students in their choice of finding suitable facilities. The recommended list has since been uploaded on the University website. Out of the 102 hostels inspected, 90 of them met the standards and were subsequently approved by the Dean of Students for recommendation to students.

# **Establishment of Neighborhood Watchdog Committees**

In the year under review, the Dean of Students in conjunction with the District Police Commander and leaders of hostels facilitated the formation of neighborhood watch dog committee. These were inaugurated by the Dean of Students and the District Police Commander.

The Watch-Dog Committees were to operate in the Ayeduase/Kotei and Bomso areas where hostels are located.

# **Students Conduct and Discipline**

In the year under review, the Office under the directive of the Vice-Chancellor constituted a number of Committees to investigate issues of misconduct by students. The Committees have since submitted reports on cases investigated and sanctions have been meted out to those who were found culpable of violation of the University's regulations.

# Student Affairs/Students Financial Services

This Office is the unit for students' records and welfare. It is also mandated to explore, solicit and offer financial assistance to students from less endowed schools, as well as needy but brilliant students studying in the University.

#### Staffing

Assistant Registrar	1
Senior Administrative Assistant	1
Cleaner/Messenger	1
National Service Personnel	5

#### Activities of the Office in the year under review Students Affairs activities

In the year under review, the Office worked together with the Deputy Registrar, Dean of Students in planning and executing of orientation and matriculation for post graduate and undergraduate fresh students.

The Office also liaised with the Ghana Immigration Office to facilitate the processing of residence permits for international students.

The Office again issued introductory and attestation letters to about two thousand, five hundred students seeking to travel outside the country during vacations and also for those seeking internship opportunities both within and outside the country.

During the year under review, a total of 18 students passed away. The Office liaised with the families of the deceased students to ensure the students were giving befitting burials.

# **Student Financial Services Activities**

#### "Ketewa Biara Nsua" (KBN) Bursary

The Office together with representatives from the Colleges, the Counselling Centre and the SRC successfully selected 1,228 students for the "Ketewa Biara Nsua" (KBN) Bursary.

#### STATISTICAL REPORT ON SCHOLARSHIP AND BURSARY'S FOR 2018/2019 ACADEMIC YEAR

SN.	Names	No. of Std. (Fresh & Continuing)	Amount (GH¢)
1	Fondazione Education Scholarship (Foreign)	47	261,798.55 (€47,655.39)
2	Educational Pathways International Scholarship (Foreign)	43	243,239.06 (\$51,140.00)
3	Timothy Ansah Foundation Scholarship	4	2,000.00
4	Standard Chartered Bank Scholarship	5	7,500.00
5	Total Petroleum Ghana Limited Scholarship	8	32,200.00
6	S.T Nankani Scholarship	10	6,200.00
7	Lebanese Community Scholarship	12	24, 000.00
8	Barclays Bank Scholarship	20	150,460.50
9	Test for Ghana Scholarship	29	46,230.00
10	Kingdom Books and Stationary Bursary	50	25,000.00

11	KNUST Bursary	332	168,500.00
12	GNPC Scholarship	695	6,571,000.00
	TOTALS	1,255	7,514,128.11

#### STATISTICAL REPORT ON OTHER SCHOLARSHIPS FOR 2018/2019 ACADEMIC YEAR

SN.	Name	Number of Students	Amount
1.	MPs & District Assembly Common Fund	11	8,500.00
2.	GET Fund	53	185,798.98
3.	ARB Apex Bank Ltd.	1	1,000.00
4.	Lower Pra	1	1,000.00
5.	Government Scholarship Secretariat	3	19,798.98
6.	Newmont Akyem Development Foundation	1	1,500.00
7.	Christ Apostolic Church Scholarship Scheme	2	5,000.00
8.	Gold Fields Ghana Foundation	5	9,000.00
9.	Ghana Engineers Architects Association of America (GEAAA)	5	7,189.47
	TOTALS	82	238,787.43

# CONCLUSION

The year, under review, has been productive. The scope of work at the Office of the Dean of Students continues to increase with increasing student intake.

# SCHOOL OF GRADUATE STUDIES



# SCHOOL OF GRADUATE STUDIES

#### INTRODUCTION

The main objectives of the School of Graduate Studies are to train and develop graduates at higher degrees to acquire specialised skills in Science and Technology. Through this training, graduates are enabled to provide appropriate research initiative and leadership in industry, commerce and other sectors of the national economy.

In furtherance to its objectives, the School collaborates with the Departments, Faculties and Colleges to develop graduate programmes which are relevant to the promotion of economic, social, scientific and technological advancement of Ghana. It is noteworthy that, in doing this material and human resources are mobilised to ensure maximum utilisation of available potential through courses and programmes organised and coordinated by the School of Graduate Studies.

Through the benevolence of Dr. J.K. Siaw Agyepong, the School can boast of one of the most modern buildings on campus. The building houses two state of the art Conference Halls and Offices.

## **ADMINISTRATION**

The following are the senior administrative staff of the School:

Prof. Nicholas Kyei-Baffour	Dean
Prof. Kwabena Ofori-Kwakye	Vice-Dean
Mr. Kwame Yeboah jr.	School Secretary
Mr Charles Owusu-Antwi	Assistant School Secretary
Mr. Mike Osei-Owusu	School Accountant

#### **Graduate Students Population**

The current Graduate Students population stands at nine thousand, two hundred and forty (**9,240**). The statistics of the student-population for the 2018/2019 academic year are as follows:

POSTGRADUATE STATISTICS FOR 2018/2019 ACADEMIC YEAR			
	MALES	FEMALES	TOTAL
GHANAIAN	6330	2703	9033
FOREIGN	125	82	207
TOTAL	6455	2785	9240

# ACTIVITIES

The School of Graduate Studies as a coordinator of all Graduate programmes run by the Departments in the University performs the following duties among others:

- Liaises with the Central Administration, Colleges, Faculties, Institutes and Departments on general issues regarding Graduate Studies.
- Advertises, administers and processes applications for prospective applicants.
- Assists various Departments in the organisation of interviews for applicants seeking admission into various programmes.

- Issues of admissions letters and register students.
- Organises seminars for students and members of staff on Graduate Studies.
- Receives and approves thesis synopsis, examination results, proposals for new programmes.
- Assists in the screening and appointment of External and Internal Examiners for Departments.
- Organises and conducts oral examinations for final year graduate students.

#### **Manuals on Graduate Studies**

The School has prepared the following documents which have been circulated online for both Staff and Graduate Students. The hard copies have also been distributed to Staff (Senior Members) and Graduate Students. These documents are expected to tremendously improve Graduate Studies in the University.

- i. Graduate Students' Handbook;
- ii. Guide for Higher Degree Research Supervision;
- iii. Guide for Preparation and Evaluation of Higher Degree Research Thesis; and
- iv. Policy on Publication.

As way of improving service at the School, the preparation of Transcripts has been automated to speed up delivery time. Additionally, a programme has been developed to track the submission and assessment of theses with the aim of stemming delays. These interventions, undoubtedly, are to make Students complete their programmes of study in good time thereby making Graduate Studies attractive.

#### **International Affiliations**

The School of Graduate Studies has established links with international institutions for postgraduate studies by way of mounting joint programmes of research and study through exchange of Staffand Students. A few of such links are already in place. Among them are, the Master of Science Programme (MSc.) in Development Planning and Management, run jointly with University of Dortmund, Germany; Master of Science programme in Geo-information Services and Natural Resources Management also jointly run with the I. C. T. of Netherlands under the auspices of the World Bank; Master of Science and Doctor of Philosophy in Water Supply and Environmental Engineering in collaboration with UNESCO and IHE Delft; Master of Science and Doctor of Philosophy in Agriculture under the sponsorship of AGRA and Building Stronger Universities (BSU), a consortium of Danish Universities.

#### **Graduate Degrees Awarded**

The School of Graduate Studies facilitates the award of the following degrees:

- Post Graduate Certificate;
- Post Graduate Diploma;
- Master of Science;
- Master of Arts;
- Master of Fine Art;
- Master of Communication Design;
- Master of Pharmacy;

- Master of Public Health;
- Master of Business Administration;
- Commonwealth Executive Master of Business Administration;
- Commonwealth Executive Master of Public Administration;
- Master of Public Administration;
- Master in Intellectual Property;
- Master of Architecture;
- Master of Philosophy; and
- Doctor of Philosophy.

#### **New Programmes**

The year under review saw the introduction of the following new programmes by various Departments and the Institute of Distance Learning through the School of Graduate Studies. These are:

- MPhil/PhD Fashion Design and Technology
- MPhil/PhD Flood Risk Management
- MSc/MPhil Creative Art Technology
- MA/MPhil Social Work
- MSc Cyber Security and Digital Forensics
- PhD Nursing
- PhD Law
- MPhil Field Epidemiology and Applied Biostatics
- MA Asante History
- MSc/MPhil Security and Justice Administration

# CONCLUSION

The School of Graduate Studies remains committed to addressing the needs of Graduate Students and has set sights on the expansion of Graduate Studies in the University through effective collaboration with the Departments. The success in achieving this, is to encourage the mounting of demand driven graduate programmes in fulfilment of national needs.

# **SPORTS DIRECTORATE**

# Preamble

Activities for the Sports Directorate in the 2018/2019 academic year started with enthusiasm and hope as it was the first time, the Directorate had been given the support to recruit talented students to beef-up the University sports teams. The Directorate did a 'Justify your inclusion' Sports Talent Hunt as part of its recruitment exercises and was able to scout for sports talents in the various Senior High Schools in Ghana.

# ACTIVITIES

**Staff Games (August, 2018):** The Sports Directorate as part of its mandate was given approval to organise sporting activities for staff of the university. The following teams took part in the competition.

- Administration & Finance
- Hospital & Sanitation
- Security Services & Maintenance
- College of Humanities & Social Science
- College of Science & Printing Press
- College of Agric & Natural Resources

At the end of the competition, Administration & Finance won the competition.

## **Inter-Hall Sports Activities**

**Freshers' Games (Sept. 2018)**: The academic year's activities started with the Freshers' competition. This was a programme aimed at enabling the Directorate unearth new talents that had been admitted into the university. It was a very successful event.

**Inter-Hall Games (Sept. 2018)**: This year's inter-hall games were held over three (3) weeks and ended with Unity Hall emerging as the Overall Hall Champion for the games.

#### Inter-Hall Athletics: Sept 2018

KNUST inter-hall athletics competition is one of the major activities organised by the Sports Directorate for students on campus on hall basis and one of its significance is to identify and select talented and good athletes to represent the University in local or international competitions.

#### Inter-Hall Cross Country: Sept 2018

The Inter-Hall Cross Country Competition is held every year and usually the first sports activity for both fresher's and continuing students in the academic year.

#### Inter-University Cross Country: Oct 2018

The Inter-University Cross Country Competition is also held every year (usually in November). However, this year's competition was held in October at UPSA. This was because of the conflict in date with the West Africa Games (WAUG). The hosting of the competition is rotated among the nine (9) Public Institutions in Ghana. The University placed 4<sup>th</sup> and 5<sup>th</sup> in the men and women's category respectively.

#### R. P. Baffour Inter-Hall Debate Championship: Oct 2018

The year's Inter-Hall Debate Championship was held in the IDL Hall. The following were the team representation from the halls:

Hall	Team(s)
Indec	5
Unity	8
Africa	4
University	4
Republic	3
Queens	5

At the end of proceedings, Fiifi Baiden and Patrick Mean from Indec emerged the overall champions for 2019.

# Pan African University Debate Championship (PAUDC): Dec.2018

A team of ten students and two officials represented the University in this event at Tanzania. The KNUST Team A which was made up of Mr. Isaac Boakye Nyamekye and Mr. Erasmus Segbefia were adjudged the best Debators for the Championship. The Universitys second team came 4<sup>th</sup> . KNUST won the Overall Trophy for the Championship.

## Mini GUSA: Jan 2019

The Mini GUSA Games are organised to select Sportsmen and Women to participate in International and National Competitions. The 8<sup>th</sup> MINI GUSA Games was hosted by the University of Cape Coast (UCC.).

## Inter-Collegiate Games/Athletics: Feb 2019

The 8<sup>th</sup> edition of the competition was held on the 19<sup>th</sup> – 23<sup>rd</sup> February, 2019. Some of the disciplines students participated in were football, volleyball, basketball and hockey. All six (6) Colleges participated in the events with the College of Humanities and Social Sciences winning the men's football, men and women's volleyball and men's basketball.

The College of Health Sciences won the women's basketball. Patronage was however low because students had to attend lectures. Again some of the Colleges could not raise teams for some disciplines.

#### Friendly Games with UG: March 2019

The Sports Directorate hosted the University of Ghana in a friendly encounter to help prepare the teams towards the impending GUSA games which will be hosted by the University of Ghana. in January 2020. Some of the games competed in were chess, table tennis and badminton.

#### Chancellor's Cup Inter-Hall Football League: Mar/April 2019

Inter Hall Football tournament is an annual event but this year's competition, was organised as part of the celebrations commemorating the 20<sup>th</sup> anniversary of the enstoolment of His Royal Majesty Otumfuo Osei Tutu II, Chancellor of the University as Asantehene.

#### Chancellor's Women Hiking: April 2019

The above was also organised as part of the celebrations of the Chancellor's 20<sup>th</sup> Anniversary. The Department of Physiotherapy and Sports Science together with the Sports Directorate organised the event.

# SPONSORSHIP FOR ACTIVITIES IN THE YEAR UNDER REVIEW

Most activities organised by the Directorate would not have been possible without the generous support of sponsors. The outfit is therefore grateful to companies' like Latex Foam Ghana Limited,

Promasidor Ghana Limited (Cowbell), Skywater, Melcom Ghana Limited, Multi Pro Ghana Limited (Indomie) and SQ System for their generous support.

# Bilateral Games with Obafemi Awolowo University (OAU)

The Directorate is very grateful for the completion and signing of a Memorandum of Understanding on the above. It is the Directorate's hope this will open up new relationships both academically and socially for the benefit of both students and staff.

# FACILITIES

The Sports Directorate was privileged to have some new facilities added to the existing ones.

The new recreational facility at Brunei has all the state of the art equipment fitted in to augment the Hale and Hearty facility.

Beach Football and Volleyball Courts (behind the University Hall) were also commissioned in the course of the year.

#### Challenges

The outfit is grateful for the support Management continues to provide for all its programmes and hopes the electrification of facilities at the Paa Joe stadium will be completed soon so all evening sporting activities could be held.

# **UNIVERSITY LIBRARY**

#### INTRODUCTION

The Prempeh II Library together with six College Libraries collaborate with faculty to provide learning resources in support of teaching, learning, and research. In the course of 2018-19 academic year, the library system, with staff strength of 120 including 18 senior members, 59 senior staff, 33 junior staff, and 10 cleaners collectively developed, managed, and facilitated access to collections on all programmes run by the university. Additionally, instructions were delivered aimed at promoting effective use of learning resources. This report summarizes the library's support efforts to teaching, learning, research, and development of learning spaces in the year under review. Attempts have also been made to highlight the main challenges that impeded effective service delivery and suggestions to overcome them.

## **ACTIVITIES IN THE YEAR**

#### **Collection Development and Management**

A total of 8,023 volumes of books - predominantly from purchases and donations - were added to the stock. These comprised 879 for the Prempeh II Library, 4792 volumes for the College Libraries, and 2,352 volumes for the Basic Schools' Libraries.

Five hundred and forty-two (542) volumes of assorted books were purchased during the period under review. These comprised 207 books on Academic Skills for the Prempeh II Library, 85 assorted children's books for the Basic School Libraries, 171 for College of Engineering, and 79 books for College of Art and Built Environment Libraries.

These brought the book stock of the entire library system to **219,856** volumes. The breakdown of the book holdings of the individual libraries are detailed below:

Prempeh II Library	135,349	
Basic Schools' Libraries	8,872	
College of Agriculture and Natural Resources	13,074	
College of Art and Built Environment	14,310	
College of Humanities and Social and Social Sciences	20,579	
College of Engineering	7,039	
College of Health Sciences	10,546	
College of Science	10,087	
Total	219,856	

#### Donations

- EPP Books Services donated assorted books worth GH¢ 40,000.00 to the University Library.
- The Prempeh II Library received 954 volumes of assorted books from individuals, governmental and non-governmental agencies as donations in addition to the books purchased.
- The College of Science library received 578 donated books from the Ramapo Project; 61 books and 37 journals were also donated by an alumnus of the College.
- The College of Engineering Library received 232 hard copies of assorted books donated in memory of the late Ing. Frank Decimus-Nerquaye-Tetteh of Accra.

- The College of Art and Built Environment Library received five (5) books as donation from Professor Rexford Assasie Oppong on behalf of Professor Leni Hoffmann, Chair for Painting/ Graphic Arts Staatiche Akademie, Germany.
- Dr. Michael Poku-Boansi donated three (3) books to the Department of Planning.
- The College of Agriculture and Natural Resources Library received two copies of CSIR-Soil Research Institute 2016 Annual Report and two copies of Ghana Journal of Animal Science Vol. 9 No.2 from Dr. Mohammed M. Buri and Professor A. Donkor respectively.
- Dr. Emmanuel Asuming-Frimpong donated five copies of assorted books to the Engineering Library.

Geo Information Science and Earth Observation, University of Twente, Netherlands also donated nine (9) bound copies of PhD theses to the Engineering Library.

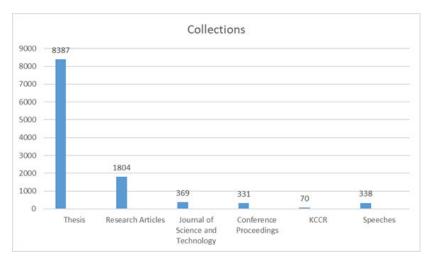
It is important to note that **not all** books received were processed and added to the stock in year under review.

#### Journal Subscription and Usage

The Library maintained its collaboration with the Consortium of Academic and Research Libraries in Ghana (CARLIGH) and the International Network for the Availability of Scientific Publications (INASP) to facilitate access to over 40,000 electronic journals from about 50 academic databases. This digital access comprised more than 100 million full text documents, bibliographic information, abstracts and book reviews.

#### Institutional Repository

Four hundred and eighty-four (484) documents were added to the repository in the year under review. This brought the total collections of the repository to 11,299. See Fig. 1 below for the breakdown of the various communities.

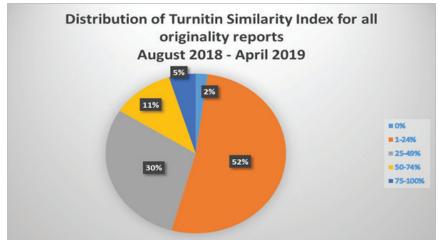


#### Fig. 1: Collections in Institutional Repository

Records from Google Analytics indicate that during the year under review the KNUSTSpace recorded 90,069 views with a daily average of 333 views. It also recorded 53,105 users per month, attracting an average of 53.056 new users every month.

#### Turnitin

Turnitin had 1,140 instructors who were actively using the software to generate plagiarism (originality) reports for their students. A total of 23,061 submissions were made by instructors while 26,061 originality reports were generated in the year under review. Find below the monthly distribution of active instructor usage as well as the distribution of Turnitin similarity index for all originality reports for the period under review.



#### Fig. 2: Active Instructors

#### Fig. 3: Distribution of Turnitin Similarity Index Off-Campus Access

During the year under review a total of 24,791 logins with an average monthly logins of 2,755 were recorded for the Off-Campus Access to e-resources. This does not though reflect total downloads in the specific databases subscribed by KNUST.

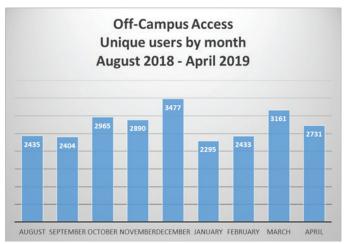


Fig. 4: Unique users by month

# Information Retrieval and Document Delivery

The Library searched and downloaded several articles on request from users. A total of one hundred and sixty request (160) were received from patrons.

#### Training

The Library trained two hundred and ninety-six (296) graduate students including twenty-five (25) PhD candidates in the use of e-resources and Mendeley as a reference management software.

#### New developments

During the period under review, the Library engaged in a number of activities aimed at achieving its strategic goals. Some of the related achievements include:

- The successful completion of CCTV project in the Prempeh II Library to enhance security for both client and staff
- Refurbishment of toilet facilities in the Prempeh II Library with funding support from GNPC
- Successful deployment of new computers or workstations at the various learning spaces within the library
- Introduction of Reading List Management System and subsequent training of all library staff on reading list system usage and management.
- Expansion of the Institutional Repository of KNUST to capture all research output of the university and second repository to archive and disseminate undergraduate scholarly works in all college libraries
- Subscription to Sciencedirect, SciVal, and Scopus products to support research activities in the university community
- Collaboration with Elsevier to run training workshops for both early career researchers and senior research managers to help maximize the use of Elsevier products
- Commissioning of new cafeteria named Bibliophile (Lover of books) by the Vicechancellor for the use of staff and students
- Installation of HP 23tm Touch Monitor in the SMS Library to be used mainly for publicity of resources and services

#### **Income Generation**

Four thousand nine hundred and ninety-two cedis, ninety pesewas (GH¢4,992.90) was generated from photocopy services. Additionally, three hundred and eighty-eight cedis, twenty pesewas (GH¢388.20) was realised from overdue fines, bringing the direct income generated to five thousand, three hundred and eighty-one Ghana cedis, ten pesewas (GH¢ 5381.10).

#### PUBLICATIONS

Two (2) articles were published; one by Edward Mensah Borteye and the other co-authored by S.A.Y. Humphrey-Ackumey and Michael Ahenkorah-Marfo.

#### SERVICE TO THE COMMUNITY

Dr. Samuel Kotei Nikoi served as the Chairman of the Governing Council of the Consortium of Academic and Research Libraries in Ghana (CARLIGH).

Mr. Kwaku Agyen-Gyasi continued to serve as Chairman of the PTA of SOS Hermann Gmeiner School at Asokore-Manpong, Kumasi.