Annual Progress Report

2017

Sena Institute of Technology (SIT)
Penyi-Dzodze Road, Unit PEN-ANY-266 P. O. Box DZ 110
Dzodze, Volta Region, Ghana
++233 (0) 243171354 | www.sitghana.org | info@sitghana.org
EXECUTIVE BOARD MEMBERS OF SIT

President - Kwasi Agbleke, PhD; Vice President - Bartholomew Dzudzor, PhD; Chief Operations Officer - Michael Agbleke; Financial Officer - Mawuko Afayizu; Treasurer - Mohammed Hannan, M.Sc.; Secretary - Archana Naik, M.Sc.; Ethics Officer - Dzigbodi Doke, PhD

ADVISORY BOARD MEMBERS OF SIT

**Scientific Board**

*Enrique M. De La Cruz, Ph.D.*
Molecular Biophysics and Biochemistry
Yale University, New Haven, CT

*Kwaku Dayie, Ph.D.*
Chemistry & Biochemistry
University of Maryland College Park

*Avery August, Ph.D.*
Department of Microbiology & Immunology
Center for Infection & Pathobiology
Cornell University, Ithaca, NY

*Patrick Higgins, Ph.D.*
Department of Biochemistry and Molecular Genetics
Director Fermentation Facility
University of Alabama at Birmingham

**Ethics Board**

*Julia M Gohlke, Ph.D.*
Environmental Health Population Health Sciences
Virginia-Maryland College of Veterinary Medicine
Virginia Tech, Blacksburg, VA

*Tometi Gbedema, Ph.D.*
Community and Regional Development Program
Department of Human Ecology University of California, Davis

**Communication Board**

*Reginald L. Jackson, PhD*
Department of Communications, Simmons College,
African American Master Artist in Residency Program, Northeastern University, Boston, MA

*Lidia Berger*
Librarian Cabot Library
Harvard University, Cambridge, MA

**Technical Board**

*Tom Broker, Ph.D*
Department of Biochemistry and Molecular Genetics
President of the International Papillomavirus Society University of Alabama at Birmingham

*Enoch E. Damson, M.S.*
Dept. of Business and Information Technology Professor, Computer Information Systems College of Applied Science and Technology The University of Akron

*Alexander Anim-Mensah, PhD*
Engineering Manager ITW Ohio

**Economic Board**

*Victoria McGovern, Ph.D.*
Burroughs Wellcome Fund Research Triangle Park, NC

*Winston Scott, Capt.*
Office of External Relations and Economic Development Florida Institute of Technology

*Edwin Mensah, Ph.D.*
Department of Economics Finance and Decision Sciences Univ. of North Carolina at Pembroke
EXECUTIVE SUMMARY

This is the second annual report of Sena Institute of Technology (SIT) from January 2017 to December 2017. The report states the description of 2017 goals, what was achieved and where more work was needed. Last year, the Institute embarked on an ambitious project to complete its infrastructure capacity. The Institute headquarters was duly completed in October 2017. Essential amenities such as electricity, water supply and drainage system were completed during the year as well. During the construction period, the Institute received donations of laboratory equipment, library books and office supplies that have been installed and in use.

The Institute advertised jobs on its platform and successfully recruited eight dedicated staff into the team who has been instrumental in our success. The Institute is lucky to have a strong advisory team (three advisory board members joining last year) to guide it through every step of the process. The combination of the strong advisory team and infrastructure development has shaped the institute into a world-class facility. In the course of a year SIT has 14 capable advisory board members and eleven dedicated research team members. As an Institute we have the infrastructure and human capital to carry out the intended research projects.

However, our efforts have not gone without major challenges. Firstly, the planning team was unable to organize our maiden conference on cell biology. The major setback was the cumbersome registration process. We have developed alternate processes to foster registration and participation. Other challenges were fundraising to pay staff salaries and buy more testing equipment; fortify the SIT headquarters with metal frames to secure it; and file 501c3 tax-exemption in the USA.

Finally, we thank all our advisors, donors and staff for making this year a success.

We hope to continue to enjoy this support in the coming years.
Introduction

Sena Institute of Technology (SIT) was founded in May 2016 to provide an avenue for developing capacity in scientific research through an interdisciplinary approach. SIT has dedicated its initial efforts on infrastructure development through the construction and completion of its headquarters that houses laboratory spaces, library, administrative office and an art exhibition center. The Institute has also built a strong human capital for executing projects.
Accomplishments in 2017
Update on the Headquarters’ Construction
We are proud to announce that after many years of construction we finally completed the SIT headquarters in 2017. The 6-room headquarters complex has an office space, wet laboratory, dry laboratory, library and an art center. The goal has been to provide a physical space for researchers to meet, interact and work to develop novel solutions to problems that face the community and the world. In addition, the Institute installed electricity, water supply, and drainage system to the facility. The Institute has installed a backup generator as a temporary solution to power outages. New hedges have been grown to define the facility boundaries. Currently, steps are underway to improve the landscaping to beautify the surroundings.
Challenges: Fortify the building with metal frames to secure it.

Dry and Wet Lab
The Institute currently has two wet laboratory spaces and one dry laboratory space. Within the year, Harvard School of Public Health donated sets of laboratory equipment (incubators, fridges, centrifuge and hotplate/stirrers) labware (glass bottles, beakers, conical flasks) and accessories (Eppendorf tubes, pipette tips) to the Institute. In addition, the President also donated laboratory equipment (vacuum pumps, pipettes, measuring balance), lab coats and kits (ph meters, photometer, thermometers). These have been shipped and installed in our facility. At the dry laboratory front, the dry lab has purchased two new computers for statistics and computation work.
Office space and library opening:
The SIT administrative office has been set up within the library. The curator oversees the office and the library. The library unit has research journals and about 100 books on subject areas such as science, business, policymaking and ethics. The President donated a projector, three laptops and office supplies to the unit as well. The library is set to organize monthly programs and training workshops for students in primary and high school. Challenges: Insure the facility against damage before opening it to the public.

Updates on Institute’s Man Power:
The Institute has recruited eleven energetic young professionals based in SIT’s main office in Ghana. They are all respected in their professional field. Institute has implemented a networking workforce system where employees work in teams rather than hierarchical positions. This is to encourage teamwork and to improve work efficiency.
New Recruit 2017
1. Curator - Marcus Adovor
2. Data Management Team - Titiloye Ojo and Marcus Adovor
3. Institute Safety Team - Aikins Ablorde, Godsway Gbeze and Samuel Kusi
4. Social Media Group - Albert Fui, Aikins Ablorde and Titiloye Ojo
5. Event Management Team - Godsway Gbeze and Samuel Kusi
6. Public Relations - Prosper Atikor and Michael Agbleke
7. Financial Officers - Mawuko Afayizu, Bartholomew Dzudzor

Regional representatives
1. Greater Accra - Bartholomew Dzudzor, Samuel Kusi and Aikins Ablorde
2. Volta Region - Prosper Atikor
3. Central and Western Regions - Godsway Gbeze
4. Northern Region - Dzigbodi Doke

New Advisory Board Members
The institute is really honored to have three new board members who have joined our existing team. They will oversee and advise the Institute on Ethics and Communication sub-groups. We are pleased to introduce Ms. Lydia Berger, Harvard University; Dr. Tometi Gbedema, University of California, Davis; and Dr. Reginald Jackson, Simmons College. We welcome our new board members. Currently, there are 14 dedicated board members who are continuously supporting us with their advice and guidance which is enabling the institute to grow.

SIT Corporation
SIT has formed a sister nonprofit organization here in the US known as “SIT Corporation” to support the Sena Institute of Technology, Ghana. The main purpose is to raise funds for SIT's mission in Ghana. The corporation has been registered with the US Federal and State Agencies. The corporation is in the process of filing a 501c3 tax-exempt application.

Staff members SIT Corporation
1. Director - Kwasi Agbleke
2. Treasurer - Mohammed Hannan
3. Secretary - Archana Naik

We have created a page for raising funds (http://sitghana.org/sitfund/)
Conference and workshops
One major event slated for this year was to organize a conference on cell biology. However, despite the fervent preparations that went into it the conference organizers had to cancel it. The major challenge was related to the registration process which was cumbersome using Eventbrite website. It was particularly difficult for faculties in Africa to register without a credit card. To address this issue the planning team has decided to have representatives in the various institutions in Ghana to register faculty and students in their host institutions as well as create a better online registration website that allows registration without using a credit card system.

Support and Donations
In 2017, the institute had received three donations. The first donation of laboratory equipment and lab wares was from Harvard School of Public Health. And the second donation of laboratory benches and shelves was from Harvard University’s Sustainability Program. The institute has also received a $500.00 donation from New England Biolab towards the Institute’s conference.

Architectural services
During last year, we were fortunate to receive the services of an architect in Boston who helped us design the building for the future SIT complex. The project will be a three-story building with laboratories, conference center, library, community center and an art exhibition center. This futuristic plan is in line with the goal the Institute’s of an interdisciplinary approach to research and the combination of Arts and Sciences.
ACKNOWLEDGMENT

Team
President – Kwasi Agbleke, PhD
Vice President – Bartholomew Dzudzor, PhD
Chief Operations Officer – Michael Agbleke
Financial Officer – Mawuko Afayizu
Treasurer – Mohammed Hannan
Secretary – Archana Naik
Ethics Officer – Dzigbodi Doke, PhD
Curator – Marcus Advor
Data Management Team – Titiloye Ojo and Marcus Advor
Institute Safety Team – Aikins Ablorde, Godsway Gbeze and Samuel Kusi
Event Management Team – Godsway Gbeze and Samuel Kusi
Public Relations – Prosper Atikor and Michael Agbleke

Advisory Board Members
Enrique M. De La Cruz, Ph.D
Avery August, Ph.D
Kwaku Davie, Ph.D
Patrick Higgins, Ph.D
Victoria McGovern, PhD
Winston Scott, Capt. Edwin Mensah, Ph.D
Tom Broker, Ph.D
Enoch E. Damson, M. S.
Alexander Anim-Mensah, Ph.D
Julia M. Gohlke, Ph.D
Tometi Gbedema, Ph.D
Lidia Berger, Ms
Reginald L. Jackson, PhD

Donors
Harvard School of Public Health
Harvard Sustainability Program
New England Biolab
INSTITUTE IN PICTURES

Mom helping to load donated items for the Institute in Boston

On the way to NY for shipping donated items

Headquarter construction in Ghana

SIT Wet laboratory

SIT Wet laboratory

SIT Library

SIT Dry laboratory

Researcher doing experiment in the lab.