











African College of Neuropsychopharmacology



School on Neuropsychopharmacology of Stress and Substance Use Disorders

School Report 2024

Aga Khan University, Nairobi, Kenya June 2-8, 2024

Table of Contents

Introduction	3
Project Financing	4
Participants Selection	4
List of Participants	5
The faculty Members	7
The program	7
Mentorship and Networking	9
Monitoring and evaluation	10
AFCNP in the Media	11
Other Activities	11
Impact/School feedback analysis	12
Faculty feedback	14
Student feedback	14
Acknowledgement	15
School challenges	15
The future	15
Conclusion	16



Introduction

The African College of Neuropsychopharmacology (AFCNP), in collaboration with Aga Khan University's Brain and Mind University, organized a one-week school themed 'Neuropsychopharmacology of Stress and Substance Use Disorders" at Aga Khan University, Nairobi, Kenya. The school ran from June 2nd to June 8th, 2024. This initiative was a pivotal step in advancing African early career researchers in biomedical research offering advanced didactic training at a cutting-edge level for junior to mid level African faculty who are beginning or about to establish independent research programs.

The main objective of the school was:

- To provide early career researchers with upto-date information on stress disorders and co-morbidity of stress with other psychiatric disorders, including substance use disorders (SUDs).
- 2. Enhance collaboration between early career researchers and Faculty across the world.

3. To develop and apply metrics of success or failure to determine the future continuation of the school.

This was the first school to be organized by African college of Neuropsychopharmacology under the direction of the AfCNP President, Prof Lukoye Atwoli, and with support from the Prof. Peter Kalivas the director for the Center for Opioid and Cocaine Addiction (COCA) at the Medical University of South Carolina. It attracted students within the African Continent and faculties across the globe. This one-week school featured intensive lectures by distinguished international faculty and participant-led poster sessions, offering a balanced approach to deepen students' insight and expertise in neuropsychopharmacology.

Participants also had the opportunity to participate in the Neuroscience Symposium that took place in Nairobi University on 10 June 2024.

Project Financing

The school was generously funded by American college of Neuropsychopharmacology (\$63,935) and, National Institute on Drug Abuse supplement for the Center for Opioid and Cocaine Addiction (COCA) at the Medical University of South Carolina (\$50,351). The funds were to facilitate the travel cost for participants and facilitators, Meals, Accommodation and materials to be used at the school.



Participants Selection

The announcement of the school was done through Aga Khan University, Brain and Mind Institute site for a period of one and half month. After the application deadline the link was locked, and no more application was being accepted. We received 242 applications finalized. The selection of participants was done by AFCNP executive committee members who ultimately came up with a list of 20 participants taking in account academic profile and the quality of the application, CV, the motivational statements, gender and country equilibrium. Selection criteria also included that applicants must be an early career scientist and researcher (within 5 years of completing the terminal postgraduate degree), Postgraduate students and trainees in psychiatry, psychology, pharmacology, and the neurosciences, from any African country.

The school targeted early career researchers/young faculty who have established or are beginning

research careers in Neuropsychopharmacology within the African continent. A total of eleven female and nine male participants were selected from Nigeria, Ethiopia, Cameroon, Senegal, Rwanda South Africa, Kenya, Malawi, Uganda, Tanzania, Congo, and Ghana. Additionally, a visiting scholar at the Aga Khan Brain and Mind Institute, who is a Kenyan and early-career faculty member at The Smith College in Boston, USA, also participated in the school and benefited from the program.

The selected participants were invited, informing them of the program's duration and requesting confirmation of their availability. Two participants from south Africa declined the offer and were replaced by others on the waiting list. Additionally, one participant dropped out a week before the program due to illness and could not be replaced given the proximity to the start of the school.

The unsuccessful participants were also informed in good time about the status of their application.

List of Participants

Student Name	Background	Gender	Country	Email Address
Arietarhire Leviticus Oghenevurinrin	Ph.D. in Neuroanatomy, Anatomy Lecturer	Male	Nigeria	arietarhirel@babcock.edu.ng
Isaac Babu Kisiang'ani	Master of medicine in psychiatry. Post doctoral fellow	Male	Kenya	drbabu88@gmail.com
Esther Wanjiku Kariuki	PhD in Clinical Psychology:	Female	Kenya	kariukiesther@yahoo.com
Hannan Aslam Admani	MSc Psychology: Mental Health Sciences, Doctoral student	Female	Kenya	hannanaslam94@gmail.com
Elizabeth Imudu Imalingat	Master Psychopharmacology. Master of Medicine in Psychiatry.	Female	Kenya	lizimudu@gmail.com
Mayeso Naomi Victoria Gwedela	Lecturer in physiology Doctor of Philosophy degree in Medical Science	Female	Malawi	mgwedela@kuhes.ac.mw
Chalachew Kassaw Demoze	Doctoral student MSc. In Integrated Clinical and Community Mental health. Lecturer	Male	Ethiopia	1234berekassa@gmail.com
Oritoke Modupe Okeowo	Ph.D. Basic Medical Science (Pharmacology / Neuroscience). Lecturer	Female	Nigeria	omokeowo@futa.edu.ng
Amanda Menzele	Masters in medical science	Female	South Africa	menzeleamanda@gmail.com
Claire Kwagala	Mimed Psychiatry	Female	Uganda	clairekwagala01@gmail.com
Dany Joël Ngassa Ngoumen	Postdoctoral Fellow. PHD neuroprotective and neurodegenerative	Male	Cameroon	danyngoumen@yahoo.com
Richard Dei-Asamoa	MPhil Clinical Psychology,	Male	Ghana	richardasamoa@ymail.com

Zahra Morawej	Junior Faculty. Master of Medicine in Psychiatry	Female	Tanzania	zahramorawej@gmail.com
Gaylord Inena Wa Inena Doctoral Student Master of Psychiatry and Mental Health		Male	Congo	gaylordinena@gmail.com
Mundih Noelar Njohjam	Neurology resident. MD Degree	Female	Senegal	njohjammundih@yahoo.com
Lwere Kamada	Doctoral Student. Master of Medicine Microbiology. Master of Public Health	Female	Uganda	lwere112@yahoo.co.uk
Boshe, Judith J.	MMED- Psychiatry,	Female	Tanzania	jboshe@live.com
David Chibuike Ikwuka	Postdoctoral Fellow. MPH Mental & Behavioural Health. PHD physiology	Male	Rwanda	d.c.ikwuka@ur.ac.rw
Dorcas Khasowa	Master of Science in Clinical Psychology	Female	Kenya	dkhasowa@gmail.com
Christopher Musembi Makau	Doctoral Student pharmacology. MSC Comparative Mammalian Physiology	Male	Kenya	musembi06@yahoo.com
Sharon Owino	Junior faculty, Ph.D. (Biomedical Science)	Female	Visiting Scholar AKU-BMI	sowino@smith.edu



The faculty Members

A diverse group of 28 facilitators, including professionally qualified and accomplished scientists in the field of neuroscience, psychiatry, psychology, pharmacology, and laboratory expertise were invited to support the school. The facilitators represented a wide range of geographical regions, including the USA, Asia, and the African continent.

Most facilitators stayed for at least three days while some remained for the entire duration of the school. This provided participants with ample opportunities to network and collaborate with these experts.

The program

Time	2 nd /June/24	3 rd /June/24	4 th /June/24	5 th /June/24	6 th /June/24
08:15 - 09:30	Arrival and	Lecture	Lecture	Lecture	Lecture
09:30 - 10:45	Hotel Check	Lecture	Lecture	Lecture	Lecture
10:45 - 11:15	In	Break	Break	Break	Break
11:15 - 12:30		Lecture	Lecture	Lecture	Lecture
12:30 - 13:30	Lunch	Lunch	Lunch	Lunch	Lunch
13:30 - 14.45	School	Lecture	Lecture	Lecture	Lecture
14:45 - 16:00	Introduction	Lecture	Lecture	Lecture	Lecture
16:00 - 16:30	Break	Break	Break	Break	Break
16:30 - 17:30	Panel	Journal Club	Journal Club	Panel	Lecture
	discussion			discussion	
17:30 - 18:00	Mentorship	Mentorship	Mentorship	Mentorship	Mentorship
19:00	Dinner	Dinner	Dinner	Dinner	Dinner

Time	7 th /June/24	8 th /June/24	9 th /June/24	10 th /June/24	11 th /June/24
08:15 - 09:30	Lecture	Lecture	EXCURSION	Kenya	Hotel Check
09:30 - 10:45	Lecture	Lecture		Neuroscience	out
10:45 - 11:15	Break	Break		Symposium	
11:15 - 12:30	Lecture	Lecture		-UON	
12:30 - 13:30	Lunch	Lunch			
13:30 - 14.45	Lecture	Lecture			
14:45 - 16:00	Research/	Lecture			
16:00 - 16:30	Academic	Break			
16:30 - 17:30	Lab Tour	Feedback			
17:30 - 18:00		survey and			
		closure			
19:00	Dinner	Closing			
		Dinner Ole-			
		Sereni			

The school's program was designed to cover a wide range of topics including the basics of nervous system physiology, focusing on drug targets, neurotransmitters, receptors, and drug mechanisms of action. The school also covered various aspects of neuropsychopharmacology, including the fundamentals of drug development such as preclinical testing, clinical trials, and regulatory approvals. It also delved into the neurobiology of mental disorders, exploring brain circuits, genetics, and environmental factors. The use of neuroimaging techniques to study brain structure and activity were also discussed. The importance of collaborative teams involving psychiatrists, psychologists, and neuroscientists

in research and clinical applications was also emphasised. Ethical considerations and substance use disorders.

Each lecture lasted 1 hour, with an additional 15 minutes allocated for a question-and-answer session. We also hosted panel discussions where facilitators deliberated on specific topics, followed by interactive Q&A sessions with participants. The participants also had the opportunity to visit the academic laboratory at Aga Khan University, as well as the radiology and pathology laboratories at Aga Khan University Hospital. This experience provided insight into the essential equipment used in neuroscience and the diagnostic processes for various mental diseases.





The program included journal club sessions, giving participants the opportunity to present their research work. At the end of each day, we dedicated 30 minutes to mentorship, allowing participants to network and interact with faculty members.

Some of the sessions were recorded and will be uploaded on the AFCNP website, providing an opportunity for people to watch them at their convenience.

Every participant received both a printed and a digital copy of the school's booklet. The booklet provided a brief overview of AFCNP and the school, detailed the sessions to be covered and included faculty profiles with their contact information, enabling students to connect with faculty even after the school.

Click here to access Program booklet

Mentorship and Networking

One significant aspect of this school was the shared accommodation for participants and facilitators at the same hotel, where they enjoyed breakfast and dinner together. Lunchtime and coffee breaks, held at Aga Khan University, were also communal. These arrangements fostered discussions and interactions beyond the lecture hall and hands-on sessions.

Mealtimes provided opportunities for participants and facilitators to connect on a personal level and share their enthusiasm for neuroscience and scientific research. Participants valued the chance to discuss scientific experiences with facilitators and seek advice for their own future careers.

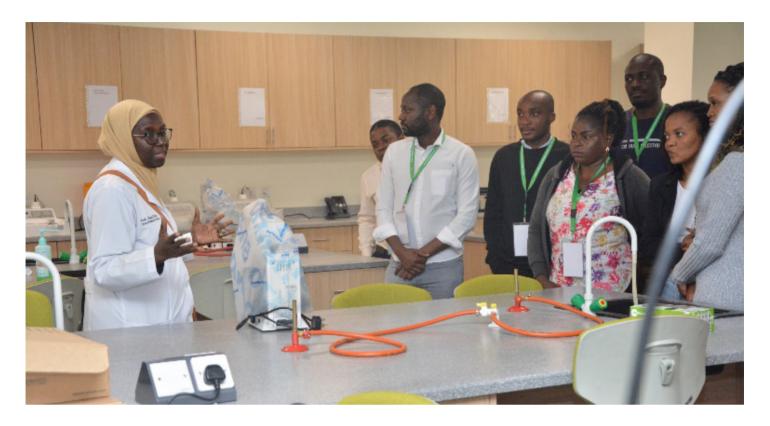
The lecture halls, arranged in a U-shape where school participants and facilitators sat side by side, also played a crucial role in promoting interactions among participants and facilitators, as well as among the participants themselves. Mentorship sessions were particularly important in boosting participants' confidence, encouraging even the most reserved to express themselves freely.

School participants presenting their own research projects/ work led to a deeper understanding of each other's work, creating networking opportunities. The formation of WhatsApp groups for the school, including both facilitators and participants, facilitated the sharing of additional opportunities, experiences from the school and other valuable information. Participants clearly understood that the primary aim of the AFCNP school was to promote networking among neuroscientists from different African countries, a much-needed initiatives that had long been absent.









Monitoring and evaluation

The school also offered a unique platform to develop and apply metrics of success or failure to determine the future continuation of the school. For this, the school adapted the established IBRO/ ISN assessments utilised for evaluation of their African neuroscience schools. The first metrics were obtained on the first day of the school where we had a pre-evaluation for students. The preevaluation entailed assessing the students using a structured questionnaire designed to gauge their expectations and anticipated benefits from attending the event. The questions aimed to understand the participant's goals and how they envision the event contributing to various aspects of their personal and professional development, as well as its impact on patient care, teaching, and research.

The participants also evaluated the lectures on several key criteria: clarity, length level of difficulty, and interaction. They assessed how clearly the content was presented if the duration was appropriate and engaging and whether the difficulty matched their academic level.

Additionally, the school participants were asked if they would like the same topics in future courses. The feedback is important in shaping future curricula to better meet the needs and interests of the participants.

Post evaluation of the school was done on the last day where participants evaluated the school based on several key criteria including their overall experience, topics they wished to see added to the program, and aspects of the course they found least useful. They also assessed their confidence in applying what they had learned, the pace of the program, and the quality of the venue and facilities. Additionally, feedback was gathered on transport, accommodation, lecture quality, planning, and organization, and opportunities for networking.

We also gathered insightful comments from the faculty regarding various aspects of the event. Their feedback encompassed the school organization, the content delivered, and their overall experience.

AFCNP in the Media

The event attracted extensive media coverage, with prominent features in large circulation in media houses including The Standard media group, The Nation media group, and the Star news paper. In addition to traditional media coverage, the brain and Mind Institute actively engaged a global audience through its social media platforms. Regular updates were shared throughout the event using the day's dedicated hashtag, #AfCNPSchool #MentalHealthResearch #FutureLeaders ensuring widespread awareness and participation.



https://www.standardmedia.co.ke/health-science/ article/2001496608/lukoye-atwoli-calls-for-increasedinvestment-in-brain-mental-health-research





https://www.the-star.co.ke/news/realtime/2024-06-03-experts-undergo-training-in-brain-mental-health-research-at-aga-khan-university/



The African College of Neuropsychopharmacok (ARCNP), which is hosted at the Aga Khan Univerty's Brain and Mind Institute, has istunched the frever school for mental and brain health in Afri

Neuropsychopharmacology is the science that en amines how neurons in the brain interact with the mind and drugs. The school has beought togethe cameroon, Nigeria, Giaria, Uganola, Tarizania, Ethipiai and South Africa. They will be learning from playing and South Africa they will be learning from for the next one week. Speaking dusting the operning of the school, Prof Lukoye Atwoil, Dean of the Aga chan University Medical College, Tast Africa as well as President of ARCMS said the main goal of the college is to expand research in mental health, examne interventions and treatments for mental dealth.

cologists, will be equipped with cutting edge train ing and mentuming as well as skills and knowledge necessary to establish their independent research programmes in their respective countries.

programmes in their respective countries.

Prof Atrool said the new school is only meant for those who are completely and truly invested in mental health and have a career trajectory that is expected to grow ever the coming years. As such, this made the selection pencess — which sure humbles that applications filed from across the conditions of the condition of the proposal in order.

She said the programme had been facilitated in partnership with higher learning institutions and private sector companies including Masinde Muliro University of Science and Tech-

"We felt that while the girls could be inspired by listening to older women, speeches may not be emough, and that's why we invited the part ners to collaborate with us," said Ms Ominde.

ners to collaborate with us, "said Ms Ominde. Prof Imbuga encouraged the learners to care fully select their career paths while considerin their passion.

their passion.

She urged them to aim higher and excel is fields that are still dominated by men.

"In the unlikely event that one of you fails to

"In the unlikely event that one of you fails to score the university pass mark, own your results, move to rolleges or technical and vocational education and training institutions. Start your career with a certificate and aim for your dream of becoming a professor," said Prof imbaga.

Other Activities

Dinner and certificate issuance

On the final evening of the program, participants and facilitators gathered for a dinner event at Emara Ole-Sereni hotel. This provided an opportunity for interaction and networking. The evening included speeches from both participants and facilitators, followed by the issuance of certificates to the school participants, acknowledging their participation in the school.









Neuroscience Symposium

The participants also attended the Neuroscience Symposium held at the University of Nairobi on June 10, 2024. This event allowed them to gain insights into ongoing neuroscience research in Kenya and engage with scientists from around the world.

Excursions

A day was dedicated to exploring various parts of Nairobi. Attendees of the school visited the Nairobi National Museum of Kenya which is a cultural and natural museum offering a comprehensive overview of Kenya's rich heritage through exhibits such as the prehistoric gallery with fossils, the

ethnography gallery with artifacts, art gallery with traditional and contemporary artworks, a snake park with live reptiles and surrounding botanical gardens, all serving as an educational resource to promote understanding and appreciation of Kenya's history, culture and natural environment.

The attendees also visited the Giraffe centre which is dedicated to the conservation and breeding of the endangered Rothschild giraffe. It offers educational programs about wildlife conservation and allows visitors to interact closely with giraffes at a raised feeding platform. They also had an opportunity to visit one of the shopping malls in Karen, all these provided a mix of educational and recreational experiences.

Impact/School feedback analysis

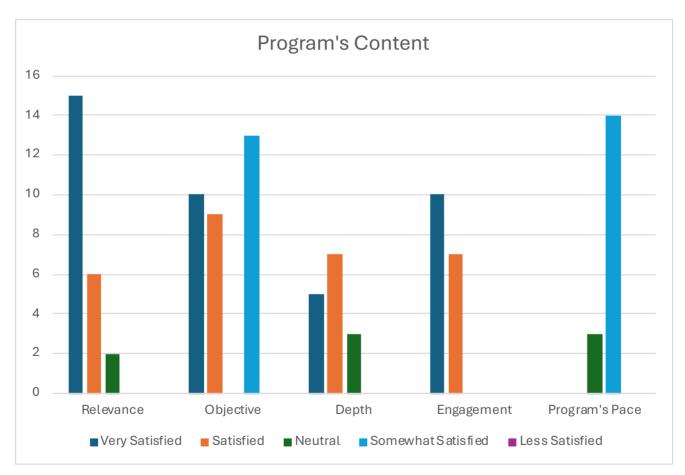


Figure 1.0

The survey results (figure 1.0) show that most participants were either very satisfied or satisfied with the program's relevance, objectives, depth, and engagement. The high levels of satisfaction with these aspects, along with the overall program satisfaction, indicate the success of the school.

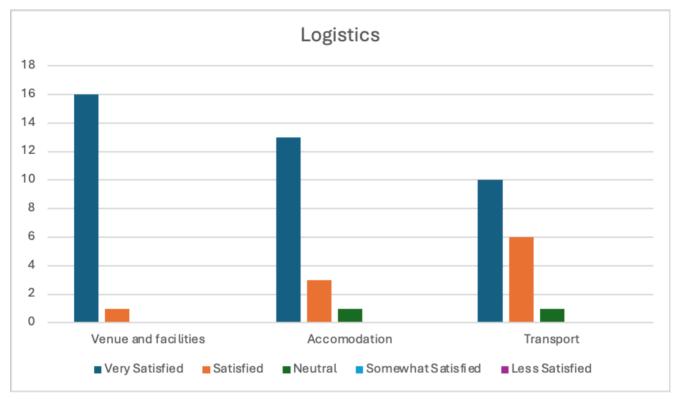


Figure 2.0
The logistics for the school (figure 2.0) received highly positive feedback from the school participants as shown in figure above. Most participants expressed high levels of satisfaction with various aspects, including the venue and facilities, accommodation, and transportation.

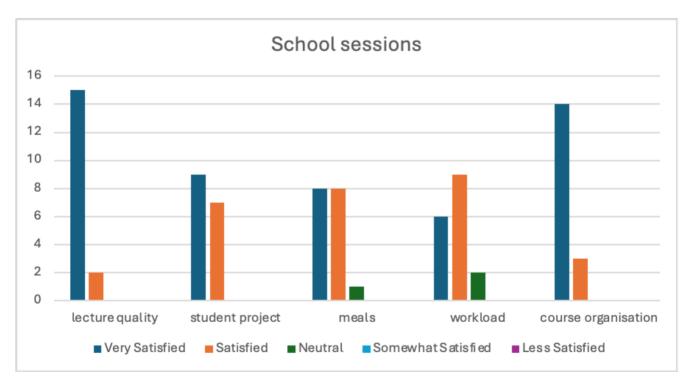


Figure 3.0

Overall, the feedback (figure 3.0) indicates a high level of satisfaction among participants, particularly in the areas of lecture quality and course organization, with majority expressing they were either "very satisfied" or satisfied" with all the aspects evaluated. There were no reports of "somewhat satisfied" or "less satisfied" in any category.

Faculty feedback

Feedback was solicitated from the facilitators regarding their experience with the school, what worked well and areas of improvement. Below are some of their comments:



"Outstanding faculty and superb mentees selected for the course this year! keep up the splendid work to engage the next generation of African clinician-scientists! I look forward to the future of their development into leaders with a voice to support change in the world. Identification of the means to sustain their engagement could include interim online presentations and conversations to maintain enthusiasm, growth, and knowledge. Given international challenges in timing, posting the videos of presentations and especially conversations that arise would be awesome!"

"The diversity of participants and facilitators, the topics were well chosen, and the meeting was well organized."

"Variety of formats (individual presentations; panel discussions; adequate time over tea/lunch to meet and discuss; etc); an active host / chair for each session to keep the conversation focused; student presentations; wide variety of focus areas (from clinical stuff to lab work, to others...). I think it was a good idea to do this all-in person, and in one week so that the attendees had a chance to get to know one another and learn from each other's journeys in academics."

Student feedback

Participants provided valuable feedback on their experience with the school, highlighting the impact of the program on their careers and identifying the aspects they found most beneficial. Below are some of the feedback shared by the participants:



"This program has indeed widened my horizon in neuroscience and has given me a clear direction for my future research endeavours. It has also exposed me to world renowned faculty who have provided direction to help me with guidance on how navigate my challenges and I believe through links with these quality faculty and fellow participant I will be able to do greatly."

"Trainee presentations were an excellent way to learn about current research being done by fellow early-career researchers. I liked that faculty gave talks on varied aspects of brain research. Talk on etiquette was very useful and something that is hardly offered at other schools on neuroscience"

"The program has broadened my understanding in the diversity of neuroscience and its applications. It has pushed me to think about aspects such as reproducibility of research in resource-constrained settings and things like advocacy for patients, colleagues and students."

"I really appreciated the open dialogue approach and time with the faculty. I also appreciated the level of research work done by fellow trainees and the faculty."

The interaction with mentees is what I valued most; I have been able to talk to distinguish professors. They have broadened my thinking especially my career path in research."

It has awakened my passion and love for the field of mental health. Often one targets the beauty of exploring new or potential areas beyond those already known when emersed in clinical work and a non stimulating environment. Meeting energetic young individuals in the same field has been refreshing and inspiring.



Testimonial video link:

https://youtu.be/UxAZ20qMaBE

Acknowledgement

We extend our sincere gratitude to the American College of Neuropsychopharmacology (ACNP) and The National Institute on Drug Abuse (NIDA) through the Center for Opioid and Cocaine Addiction (COCA) at the Medical University of South Carolina for their generous financial support. Their contributions have been instrumental to the success of our program, and we look forward to their continued partnership to further impact early career researchers.

We also wish to thank The International College of Neuropsychopharmacology (CINP) for their invaluable support in providing one of the keynote speakers, who delivered an enlightening presentation on psychopharmacology.

Lastly, we are deeply grateful to Aga Khan University and the Brain and Mind Institute for the exceptional support in providing faculty, facilities, and expertise. Their contributions were crucial to the success of our program.

School challenges

There was a large pool of highly qualified applicants, and we had to select a small cohort to ensure meaningful participation in the school. We will evaluate the optimal number of participants for the next school. The primary objectives were

to ensure a balanced distribution of participants across the entire African continent, which inevitably led to the exclusion of some exceptional applicants.

The future

We propose to increase the number of participants from 20 to 30 for the next school to ensure comprehensive representations of all countries in the African region. This will enhance country representation and positively impact more early career researchers in the field of neuropsychopharmacology.

We have established a WhatsApp group to facilitate ongoing connections between the

school participants and faculty. This platform enables participants to share career opportunities among themselves. Moving forward, the AFCNP will conduct annual follow-ups to monitor the participant's academic and professional progress where we will be checking for any new promotions, appointments, grants, publications, and other notable achievements.

Conclusion

The school was a resounding success, as evidenced by its significant achievements and the positive responses from both the facilitators and participants. Through a combination of intensive lectures by distinguished international faculty, participant led poster sessions, and practical experiences, the school accomplished its primary goals. It equipped early career researchers with latest information on stress disorder and substance use disorder, promoted collaboration between researchers and faculty worldwide, and developed metrics to evaluate the program's future success.

The positive feedback from both the facilitators and participants, along with media coverage and successful networking opportunities, highlighted the profound impact of this initiative. It not only enhanced the participants' professional growth but also contributed significantly to the broader field of neuropsychopharmacology in Africa. This school has set a high standard for future schools, ensuring continued progress and collaboration in this critical area of research.



Links to Videos recordings- AFCNP Recorded Sessions

Links to photos-AfCNP 2024 Photos and AFCNP Dinner photos

List and profile of Faculty members- Click here

Attendance list - Trainees attendance list

Faculty List- Faculty Members attendance list

African College of Neuropsychopharmacology



School on Neuropsychopharmacology of Stress and Substance Use Disorders











