



An Africa-led initiative to bridge the skills gap in Applied Sciences, Engineering, & Technology

RSIF Update on measures to ensure implementation continuity and students support during the COVID-19 pandemic

October 2020: As you are aware, over the last 8 months, the entire higher education, science and technology community has been challenged by the covid 19 pandemic. The rcu has made significant efforts to respond to challenges presented by the covid19 pandemic to its own constituency. The Response to COVID has been across all three RSIF operational areas or "Windows" (PhD Scholarships & capacity building; Research grants; Innovation Grants). The Regional Coordination Unit's (RCU) response has been enabled by a closer engagement with students and the faculty members and informed by a mix of surveys, consultations, and adoption of best practices to support clients during the COVID-19 period.

Student Support

When COVID-19 was declared an international pandemic in March 2020, 12 of 15 RSIF Cohort I scholars were doing their international sandwich programme in Korea and USA, while 67 RSIF cohort II scholars had just accepted their scholarships and were due to travel to the 11 RSIF African Host Universities¹ to start their doctoral studies. All 11 AHUs were subsequently closed, and students were forced to engage from distance. Like other actors in the higher education sector, RSIF has had to respond to the rapidly evolving context of university closures, travel restrictions and lockdowns. Fortunately, universities staff were able to continue to engage with PhD students and they have focused the time to work with supervisors and other staff on theory, literature and writing. Cohort 2 students have taken advantage of this time to work with supervisors to register and develop their research proposals. For cohort two students, students have struggled with access to laboratories and equipment for which access has been limited.

Icipe, RSIF's RCU has provided the following support to RSIF Students:

- a) **Support for registration:** all 67 students were supported to register from distance by working with AHU contact persons, faculty and administrators. All 67 are now registered.
- b) **On-line orientation and support:** The student orientation training for the 67 RSIF Cohort II students were successfully implemented online with all students attending. The trainings for students were all reviewed and revised to for online delivery.
- c) **Continuous Online learning support:** The scholars were provided with online training and coaching for their academic writing empowering them to continue writing their proposals as they wait to travel to their AHUs. Students are working towards identifying research topics, supervisors, and developing research proposals from distance with online support. *icipe* remained open during the pandemic to ensure continuous support to students and other programs. An online briefing session was held with all scholars and information shared about the COVID-19 situation to confirm that their scholarships will continue.
- d) **Training on use of E-resources:** All students from cohort 1 and Cohort 2 were trained on access to e-resources and how to access and evaluate scholarly information resources; information resource search strategies; available open access resources including research4life; innovative solutions used in scholarly research writing; and to gain practical skills on Mendeley as a reference management and citation tool.
- e) **Psychosocial support and self-study from home:** Recognising the challenges posed by the Pandemic to students and their families, a series of webinars were organised with some focusing on how to deal with mental health for academics and sharing coping strategies.

¹ The full list of 11 African Host Universities can be found at <u>https://www.rsif-paset.org/calls/host-institutions/</u>





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f) **Evaluation of student needs undertaken:** To support the planning and design of online support to student a number of surveys were undertaken to guide implementation. These were used to prepare online support and training workshops.

"During the COVID-19 lockdown, it has become far more challenging to balance academics with being a fulltime mother. Finding the time and space to read, think deeply, and write is difficult, to say the least. Recently, I had to give an online presentation of my research and found it very hard to concentrate and do well with my daughter demanding my full attention in the background... I change hats between mom and researcher throughout the day, giving her my full attention during playtime, and taking advantage of her nap time and early bedtime for four hours of uninterrupted research time." (RSIF Cohort I scholar)

RSIF Research and Innovation Grants

The PASET EB approved the award of 14 Research and Innovations Grant projects in May 29,2020 in the midst of the global pandemic and increasing measures by governments to contain the spread of the virus. Despite the temporary closure of the 11 AHUs, the RCU was able to engage team members of the successful projects to provide online support to facilitate the grant award process. Virtual workshops were held in June 29 and 30, 2020 to provide project teams with support to revise their project documents to meet the requirements of RSIF and the overall objectives of the grants. The workshops were each attended by over 20 university staff including officers from technology transfer officers for the participating universities. Further, the RCU provided teams with one-on -one technical support virtually to help them complete their grant project documents i.e (proposals, budgets, workplans and result matrices) and coordinated the signing of Project Grant Agreements to finalize the formal contracting process.

The RCU has designed a technical assistance plan to provide support virtually to project teams to ensure regular engagement with project teams. The RCU will also continue to monitor the impact of the pandemic on implementation of their activities.

University Capacity Building

Capacity building activities are aimed at preparing PhD scholars to undertake quality PhD research for successful completion of the doctoral program, and to enhance post-PhD employability and a successful future career in academia, research, and innovation. The activities also support faculty to enhance their training delivery. To help universities respond to COVID-19 *icipe* has provided:

- a) Linked all 11 AHUs to two training workshop on 'The use of Online Educational Resources in Higher Education' and on 'Online Educational Resources as a Response to the COVID-19 Crisis' co-organized by EPFL (Switzerland) and UM6P (Morocco): In partnership with the University Mohammed VI (UM6P), RSIF AHUs have received training on the two topics above and accessed numerous resources and training courses in the form of line materials. Two webinars were organized focused on higher education and COVID and on the use of online resources including explaining processes to train/support professors interested in integrating MOOCs or OER into their existing courses and to train on key concepts linked to integrating OER, including pedagogical 'grain' (block), pedagogical scenario (lesson plan) and learning objectives.
- b) Training on 'Helping Faculty Deliver their Courses Online during the COVID-19 Crisis': An online teaching webinar organized by RSIF on 17th June: "An RSIF Solution Session: Continue Teaching Your Course Online during the Covid-19 Crisis" with Dale Johnson, Director of Digital Innovation at Arizona State University. The objective of the webinar was to provide African University faculty and lecturers with some basic knowledge to make the rapid change from classroom to online teaching during the time of Covid-19 to ensure the continuation of learning. Approximately 80 university faculty from East, West and Southern Africa attended, including participants from nine AHUs.





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- c) Access to online resources and publications: RSIF is providing access to 15,000 online resources including linking to new resources that have become freely available during the time of COVID-19. A training was organized for staff and scholars on how to use e-resources.
- d) Videoconferencing facilities for AHUs: RSIF is in the process of purchasing a set of video conferencing facilities for each of the 11 African Host Universities.
- e) **Strengthening university innovation and delivery:** RSIF identified staff of the 11 AHUs to participate in a training with the Worcester Polytechnic Institute (WPI) on COVID-19 and 3D printer assembly as well as printing of face masks, face shields and respirator parts in April 2020. The training involved a total of eight sessions and was attended by staff of all the eleven universities. Universities were able to learn practically how to print various PPEs and supplied these to hospitals and to the public.

Next steps and way forward

As we look ahead for the next 3-6 months we continue to work with students and supervisors to develop timetables that mitigate delays in research and graduation timeframes, optimizing online interaction and work. While there are some positive consequences in terms of quick adoption of online tools during the pandemic, RSIF recognizes the challenges its scholars face during the COVID-19 pandemic. The RCU is providing extra support (e.g., close communication, a mental health webinar) to help them complete their outstanding research and data analysis and return home. The 82 RSIF scholars are being trained to be part of the rising tide of African science. With their innate talent and innovativeness and the knowledge, skills, and networks gained during their doctoral studies, they will contribute to advancing science, reducing gender gaps in STEM research, and, ultimately, socio-economic transformation in Africa.