CODATA-RDA Research Data Science Summer Schools
Building Research Data Skills for the World

Creating a Generation of Data-Literate Researchers

The CODATA-RDA Research Data Science Schools offer foundational and advanced data skills to the new generation of researchers and data scientists. Equipped with world-class data skills, these young researchers, from all over the globe, will be your future employees and users of your services: they will become the data scientists that industry and research desperately need.

Contemporary research – particularly when addressing the most significant, transdisciplinary research challenges – cannot effectively be done without a range of skills relating to data. Researchers in all domains now need competencies that range from data analytics to data management, from visualisation to databases. Within Europe alone there will be a need for 500,000 researchers with data science skills.

This need is particularly acute for researchers from Low and Middle Income Countries (LMICs). As research data and governmental data becomes increasingly open and shared, LMIC researchers have a remarkable opportunity. Foundational and expert data skills are required to advance research and to benefit society. The vision of 'A World that Counts', a world that uses data to understand and to address its challenges and to promote enterprise, is one that will be achieved by data literate researchers and data scientists. As noted in a recent Economist report, Africa is a place of 1.2 billion opportunities, where the promotion of skills and innovation will be key.

The Goal

To help meet these needs, two global organisations, CODATA (an organisation established by the International Council of Science to promote open research data, and to advance data science and data skills) and the Research Data Alliance (an organisation composed of almost four thousand leaders in Research Data) have come together with a vision to provide a series of Summer Schools which will provide world class training in Research Data Science. The schools are designed to progress from foundational to advanced skills. A more detailed description of this vision is in the attached document.

The first of these schools was run at the Abdus Salam International Centre of Theoretical Physics (ICTP) in Trieste, Italy from August 1-12, 2016. The ICTP is one of the world's outstanding institutes for all areas of science. It is mandated to support LMIC science and provides fantastic facilities. In addition to support from CODATA and the RDA the schools are working in partnership with a variety of organisations including The World Academy of Sciences, GEO, The Association of Commonwealth Universities, Software Carpentry and Data Carpentry and the Digital Curation Centre. Instructors came from The UK, Belgium, Italy, South Africa and the United States. The event was an outstanding success. Details of the school can be found in the attached document.

The schools were run with equal success in Trieste and São Paulo, Brazil in 2017 and 2018. The first African school ran in Kigali in October 2018. The regional schools run outside of Trieste leverage

local skills as a proportion of the material is delivered with local instructors. We plan to continue to expand the number of regional schools and hence get to an increasing body of students.

Though most of our students came from LMICs, the training we provide is world class and endorsed by CODATA and RDA. The curriculum is equally applicable to researchers from High Income Countries.

An essential feature of our vision is to work with students before and after the course, so that they will be well-equipped to use the skills and work with us and colleagues to organise a similar schools in their home or regional institution. It is in this way that the schools can achieve maximum impact. Our ambition is to scale to a worldwide initiative whereby an expanding network of instructors, open and online materials will make it easy for the schools to be run in many locations and for students to do effective preparation and reinforcement.

Further details about the school and its goals can be found at http://bit.ly/2lhTIw5 .

Why we are approaching you

Please help us take the next steps towards expand the programme and providing regional schools to 'spread the message' and achieve our vision of a global network of short courses providing foundational and advanced data skills. We invite sponsorship which will cover the costs of providing instructors for the next Trieste school as well as bursaries for students from LMICs.

Sponsorship of the schools have the opportunity to support and meet researchers who may look for careers in your industry or will go on in the longer term to make decisions on purchasing products and services that you deliver.

Optimal numbers for the smooth working of the school at ICTP will be 50-60 students. Due to publicity from our networks most of these will be from LMICs and there is a high proportion of female applicants.

What we are requesting

We propose four possible levels of sponsorship

- Platinum Sponsorship €50,000
- Gold Sponsorship €25,000
- Silver Sponsorship €10,000
- Bronze Sponsorship €5,000

All sponsors will receive high levels of publicity at the schools in the form of sponsorship materials, press releases and on the partner organisations' websites and in the newsletters of the International Council of Science, TWAS and ICTP. Gold Sponsors will have the opportunity to give an evening seminar to the students. Platinum sponsors will also have the opportunity to engage more deeply in the curriculum by taking part in the teaching of a half day course. All sponsored instructors and students will be listed as such in all communications and they will be required to blog and prepare short video posts about their experiences.

Further Information and Applications

Further information about the schools can be found at http://indico.ictp.it/event/7658/, http://www.ictp-saifr.org/?page_id=15270 and http://www.codata.org/working-groups/research-data-science-summer-schools .Details of the Task Group to run the schools can be found at http://bit.ly/tg-data-training.

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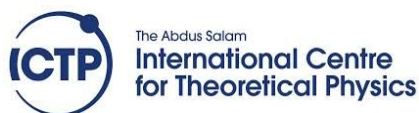Dr. Marcela Alfaro Córdoba (marcela.alfarocordoba@ucr.ac.cr), Universidad de Costa Rica

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Current Partners