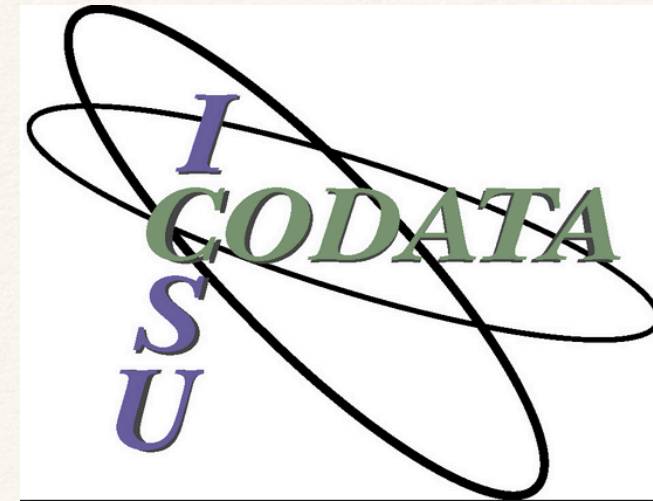




High level summary for the RDA IG Education and Training on handling of research data

CODATA/RDA WG Summer School on Research Data Science for Low and Middle Income Countries

Rob Quick
Research Technologies
Manager High Throughput
Computing
Operations Officer - OSG
Operations Officer - SWAMP

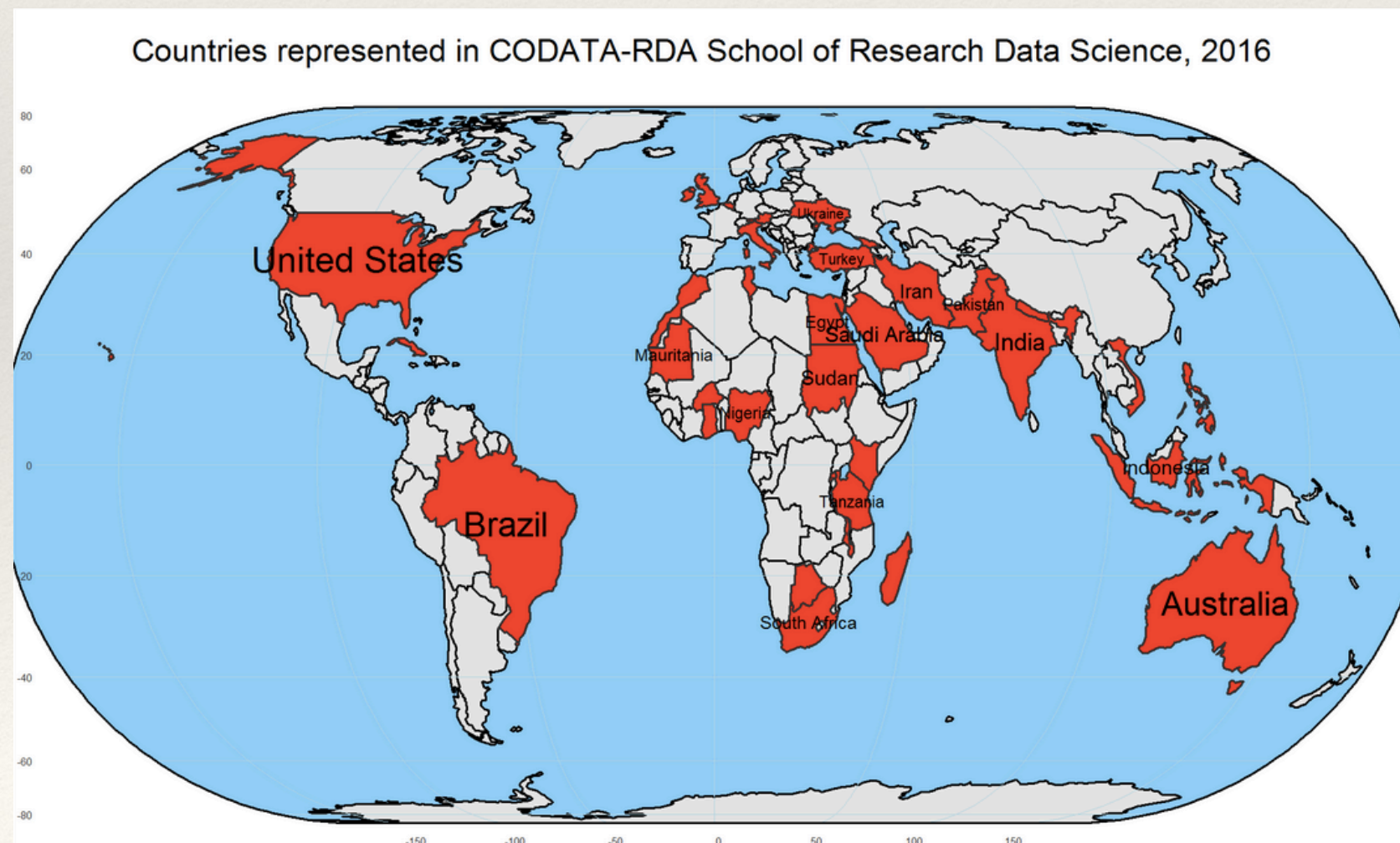


The Past



#DataTrieste 2016 by the numbers

- ❖ August 1-12, 2016
- ❖ Trieste, Italy - Abdus Salam International Center for Theoretical Physics
- ❖ 70 Students from 35 Countries (320 Applicants)
- ❖ 16 Instructors from 12 Institutions



Curriculum

- Open Science - challenges and opportunities
- Research Data Management
- Author Carpentry - best practices for 21st century scientific publishing
- Automation of repetitive tasks in Linux Bash
- Data analysis in R
- Principles of visual data analysis
- Data visualisation in R
- Databases and SQL
- Version control and collaboration with git and GitHub
- Machine learning and recommender systems in R
- Neural networks

“The CODATA-RDA Summer School was of tremendous value to me, not only as a researcher, but also as a person. I sharpened some skills that I have learned previously and learned many new tools / skills. Some of the lessons were a bit too advanced for me, but it served as an eye-opener and made me realize how powerful the tools are. Needless to say, this sparked my curiosity and ever since then I just want to learn more about the tools and show it to other people. I qualified as a Software and Data Carpentry instructor soon after the Summer School and ran a Genomics Data Carpentry Workshop at my institution (North-West University, Potchefstroom). We are planning on running several workshops throughout the year. As for the personal value that I gained from the Summer School, I have much more confidence in my skills and am much more involved in the communities. Of course I also developed precious friendships, with the possibility of future collaborations. If I could summarize it in two words: overwhelmingly invaluable.”

—Bianca Peterson

—North-West University - South Africa

The Present

- ❖ July 10-21, 2017
- ❖ Trieste, Italy - Abdus Salam International Centre for Theoretical Physics
- ❖ Applications are open for #DataTrieste 2017
 - ❖ Send interested students to <http://indico.ictp.it/event/7974/> to apply
- ❖ Addition of and Advanced Session July 24-28 focusing on Bioinformatics Data
- ❖ Several former students interested in becoming future instructors will be invited

The Future

- ❖ December 2017
- ❖ Sao Paulo, Brazil - International Center for Theoretical Physics - South American Institute for Fundamental Research (SAFIR)
- ❖ Continue to build instructor and classroom assistant base - “Train the trainers”
- ❖ Build a sustainable infrastructure to allow future schools to be planned and executed without the continual struggle to find funding
- ❖ We currently have more requests for providing summer schools than we have effort
- ❖ Plan to add 1-2 additional school instances in 2018

- ❖ Special recognition to Simon Hodson, Hugh Shanahan, Anelda van der Walt, and Andrew Harrison for doing all the work to make #DataTrieste 2016 possible and for continued support into future schools
- ❖ And thanks to the 16 instructors who made #DataTrieste 2016 a huge success