

Dr. José Romeo Stuardo Barría, University of Concepción, Chile, 1929 – 2021

A personal account and a thank-you

In June of this year, José would have celebrated his 92nd birthday. Sadly, this will not happen. José passed away a few days ago leaving his wife Theresia, the families of their two children, and 4 grandchildren. To the families, I would like to convey my sincere condolences. It leaves many of us who have worked and shared thoughts with José sorrowful but also with admiration for what he had achieved during his long and productive life and the impact he has had on higher education.

As a professor at the University of Concepción (UdeC), he was a truly interdisciplinary marine scientist whose broad training and skills allowed him to inspire people in fields as far apart as zoology and remote sensing, but also to build bridges between national and international scientists and between research institutions from the Magallanes to Woods Hole and with scientific organizations from all over the world.

My liaison with José Stuardo began at the SCOR meeting in Amsterdam in 1998. José was part of a small team of ocean scientists who had met a few weeks earlier with representatives of the Scientific Committee on Oceanic Research (SCOR) and the Intergovernmental Oceanographic Commission of UNESCO (IOC) at the Rockefeller Foundation's Bellagio Study Center near Como in Northern Italy. The team had discussed plans to create regional graduate education programs in different parts of the world and suggested that the Rockefeller Foundation develop a format for programs in the field of Ocean and Marine Environmental Sciences. This was the event and the time when Regional Graduate Networks for Oceanography (RGNO) emerged and later became a pillar of SCOR's capacity-building initiatives.

And this is how our lasting friendship began: At the annual SCOR meeting in Amsterdam, José was on a mission to promote the RGNO idea. He already had something to show. Beginning in the 1980s the UdeC had developed a modern oceanography program, first with a Master of Science Program, which then expanded into today's well-recognized Ph.D. program in oceanography, the "Concepción graduate course model in oceanography". He had included everything necessary for a true ecosystem approach to oceanography: ocean physics, marine ecology, zoology (his own field of expertise), remote sensing, chemistry, sedimentology, modeling etc., but he was still on a mission to expand. His program lacked marine microbiology. When he learned that the person he was talking to was a microbial ecologist who had been trained for international course work at the Woods Hole Microbial Diversity courses, it took him less than a second to invite me to teach a microbiology course in his program at UdeC. And I did not have to consider my answer for long because, personally, I owe Chile a lot.

We did not hesitate and started with the microbiology course - which later became ECODIM (Ecology and Diversity of marine Microorganism) in January 2000. Thanks to José's charisma he was able to convince others to follow and support the idea so that we could start so quickly after the idea had been born. At the time, microbiology at UdeC was focused on medical, pollution, and technological aspects, yet José was able to convince his colleagues from the medical microbiology department to help him realise the idea, making my start

there considerably easier. By the time José retired from active duty at the university his initiative had turned into the Austral Summer Institute (ASI) that annually offers globally recognized courses about all aspects of oceanic research and that is being taught by a rotating and truly “International Faculty”.

Having himself studied abroad, he also realized that the young scientists then studying at well-known research universities abroad needed opportunities to transfer and apply what they had learned when they returned home. He himself had participated in international projects and had in mind that international collaboration should more often be initiated by researchers from the region where the research took place. He wanted them to become the leaders of regional research projects that attract international attention. His approach had convinced me more than anything that the dissemination of knowledge through capacity-building should focus on young people in developing countries if we aim to confront and possibly solve challenges of change as a global human society.

At the time of the Bellagio meeting, pride in what Chile has to offer might have played a part leading to the awareness that if the South wanted to secure its own research opportunities and remain instrumentally involved in the research in its oceans, it must train its own people. Measures were needed to promote ocean sciences not only by acquiring ocean-going research infrastructure and land-based laboratory facilities for the returning scholars but also by training its own students to be curious, to need to find out, to ask interesting questions, and to answer them by carrying out research in the oceans in front of them on all sides of the South American continent.

At about the same time, the regional community was becoming more and more aware that oceanographic research must involve more than caring for the sustainable exploitation of fish stocks; that it is equally important to know why the fish are there and what has happened if certain species have disappeared from the local waters. In addition, due to a number of interesting scientific discoveries in the hypoxic waters and the anoxic sediments, the scientific community realized that the Humboldt current upwelling system was of interest not only to them but to many oceanographers worldwide. Many of them were investigating the consequences of global change effects, topics that required a global view on environmental problems, and an understanding of the interacting ocean and climate processes that influence regional oceanic ecosystems. It became a necessity to further globalize ocean research and apply its findings for the benefit of local communities that needed them.

It shows remarkable foresight into this need for research and education in oceanography that a graduate program in oceanography had been established at the University of Concepción in the 1990s. Over the years, José saw the regional graduate program in oceanography develop in the direction he had hoped it would. He experienced how his young colleagues could build careers and get funded for an innovative combination of local, national, regional, and international collaboration.

I like to remember José as an inspiring friend. We shared a respect for nature and the philosophy that neither science nor scientists will save the world, it's our example and behavior, that must be based on understanding why we are doing what we do, and to be ready to adapt in time.

I spent some time with José whenever I was in Concepción. He and Theresia showed me beautiful and strange things in the countryside and in Chileans' way of life. Our common interests were education and training young scientists, an activity that he had successfully pioneered and promote at UdeC for many decades. It was his ability to bring scientists from all over the world together with young scientists and the students we taught that motivated me to follow in his approach. What he was able to do for the benefit of students from all over South America and beyond inspired me to try out a similar program in Africa.

We owe thanks to José, for the foresight, to establish a regional program in which resources have been pooled and shared, but also for putting so much of his personal skills and institutional efforts into making it happen, sustaining it for many years, and for turning it over into hands that are as committed as he was to having it continue. ASI, the Austral Summer Institute at UdeC, has become a truly South American highlight initiative from which many students and investigators from South America, but also worldwide have profited. It is to be hoped that also this of José's legacy will be maintained.

Zürich, April 5, 2020

Kurt Hanselmann