

Acceptance speech

20 June 2023

Susan C. Alberts, awardee in the Ecology and Conservation Biology category (15th edition)

I'm delighted to accept this award on behalf of myself and the two other Laureates for the category of Ecology and Conservation Biology, Professor Jeanne Altmann and Professor Marlene Zuk. We are all deeply grateful to the BBVA Foundation and the Spanish National Research Council for their recognition of the fundamental importance of both science and cultural creation for our society and our lives. We are also grateful to the committee, including Drs. Emily Bernhardt, Maria Begoña Garcia, Paul Brakefield, Pedro Jordano, Joanna Lambert, and Rick Leemans. And we are humbled by being the recipients of this recognition.

The citation for our award refers to our “outstanding contributions to the behavioral and evolutionary ecology of animals”; I'll briefly mention those contributions now. Prof. Altmann and I work together on one of the longest-running studies of wild primates in the world, the baboons of the Amboseli basin in southern Kenya. Prof. Altmann began this long-term research in 1971 with her husband Stuart Altmann. By the time I graduated from college 12 years later, she was already a legend in behavioral ecology for her contributions to methodological rigor, and to our understanding of the intimate connection between social behavior, on the one hand, and how animals survive and reproduce on the other; this connection lies at the heart of the problem of how wild animal populations will persist in a rapidly changing world. Together, Prof. Altmann and I, with our colleagues, have sought to push the boundaries of knowledge about how non-human primates – and by extension we humans – navigate the complex social and physical landscapes in which we live. We hope that this knowledge has contributed to our understanding of how to conserve these animals.

Professor Zuk, too, was nearly a legend by the time I graduated from college, even though she's only a couple of years older than me – because, as a graduate student, she developed one of the most famous and important

hypotheses in evolutionary biology. The Hamilton-Zuk hypothesis, named after Prof. Zuk and her mentor and collaborator William D. Hamilton, states that genetic variation in a population – essential for populations to persist – can be maintained if females are able to detect and choose males who have strong immune systems. This hypothesis has generated volumes of downstream research from hundreds if not thousands of researchers, and has led to large increases in knowledge about how the immune system, morphology and behavior have co-evolved. Since this very first contribution, Professor Zuk has continued to be at the forefront of knowledge with her research on how sexual traits evolve. Furthermore, she's been an outspoken and inspiring advocate for women in science and has had a huge positive influence on many in the field, including me.

None of us would not be here today without the help and support of many people. We are all very grateful for the support of our home institutions, Duke University, Princeton University, and the University of Minnesota. We also owe a deep debt of gratitude to the U.S. National Science Foundation and the National Institutes of Health, who have supported our work for decades.

Our families and friends have provided love and support through the many days, months, years, and frequent absences from home while we pursued our research dreams. In my case, I have personally been continually inspired by the examples of my daughters, Michele and Teresa, who have unconditionally loved and supported me even when they missed me, and who have grown into remarkable, admirable adults, in spite of the fact that my attention was often elsewhere.

Finally, I know how deeply honored all three of us feel to have worked with the brilliant students and collaborators who made possible the research that we three are being recognized for today. It takes a village to do science and all of us have reveled in and been humbled by the particular scientific villages we've had the honor to inhabit.

Thank you.