
A TRIBUTE TO DR. ROSAURA RUIZ GUTIÉRREZ. ACADEMIC, POLITICIAN, HUMANIST; AWARDEE OF THE 2025 AYALA MEDAL¹

*Homenaje a la Dra. Rosaura Ruiz Gutiérrez.
Académica, política, humanista; galardonada
con la Medalla Ayala 2025*

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I am profoundly grateful for the privilege to introduce the 2025 Awardee of the Ayala Medal: Dr. Rosaura Ruiz Gutiérrez, currently Mexico's Secretary of Science, Humanities, Technology, and Innovation.

Secretary Ruiz, please accept my affectionate, heart-felt congratulations!

My gratitude extends to Comillas Pontifical University for honoring my late husband Francisco José and me by associating our names with its Center (Cátedra) of Science, Technology, and Religion and with the Medal that will grace—and will be graced by—"extraordinary accomplishments in bridging disciplines and nations to bolster the intellectual, spiritual, and humanitarian contribution of science."

¹ Speech delivered by Hana Ayala at the Comillas Pontifical University, on October 3, 2025 on the occasion of the 2025 Ayala Medal awarded by the Hana and Francisco José Ayala Center for Science, Technology, and Religion at the same university.

Please note that the word contribution is singular. Interdisciplinary and trans-national, these bridges must take science to a new level of benefit to mankind—a level that interlinks and mutually reinforces the intellectual, spiritual, and humanitarian potentials of science.

The award of the 2025 Ayala Medal to Dr. Rosaura Ruiz invites a reflection on the might of inspiration.

In a brief “Narrative Bio” that he wrote on April 8, 2015 (unpublished), Francisco Ayala states: “Theodosius Dobzhansky was a tremendous inspiration and probably is the person that most influenced my way of thinking about science... He was also interested in the deeper meaning of his discoveries and in questions like the meaning of life. This was very inspiring to me.” Francisco became a preeminent intellectual progeny of Dobzhansky, elevating his giant legacy to new frontiers.

It was a joy and a great inspiration for me to witness Francisco’s passionate sharing of the conquest of these new frontiers with ingenious young scholars—his own intellectual children, Dr. Rosaura Ruiz prominent among them. It was in this context, and with deep admiration, that, in July 2024, I wrote a note to Dr. Ruiz, congratulating her on her nomination for—and acceptance of—a Cabinet position in the Administration of the incoming President of Mexico Claudia Sheinbaum. “What a magnificent achievement—so deserved and so promising for Mexico!”, I wrote. “In you, in this achievement, Francisco’s legacy is gaining a new dimension of continuity, immortality, and enrichment of its benefits for humanity.”

In the words of Dr. Ruiz, her priorities as Government Minister include “to promote more researchers, both male and female, and greater scientific output, [with] a strong focus on the humanities...[and that] knowledge be applied for the benefit of humanity.” (Interviewed by Daniela Zambrano for *El Heraldo de México*, June 30, 2025.)

Allow me to ground this noble perspective in a retrospective.

Dr. Ruiz has pioneered, in Mexico, the studies of evolutionary theories from the scientific, historical, and philosophical perspectives and from the angle of epistemology. Her distinguished academic trajectory started at, and continues to be profoundly bonded with, the National Autonomous University of Mexico (UNAM). She holds a doctorate in Biological Sciences awarded by UNAM. It was during her postdoctoral stay at the University of California,

Irvine, with Francisco Ayala, that a lasting connection was formed between the professional journeys of the two.

She became a professor at UNAM's Faculty of Sciences and held various administrative positions within UNAM, including as the head of the Secretariat of Institutional Development, Director of the Faculty of Sciences, and Coordinator of Special Academic Projects of UNAM's General Secretariat. From the platform of UNAM, she has built bridges of knowledge across and beyond Mexico. She was an invited professor at the University of California and the University of the Basque Country, as well as a contributing professor to the Department of History of Science of the Spanish National Research Council (CSIC).

Dr. Ruiz is a member of the Mexican National System of Researchers and the Mexican Academy of Sciences. Within the Academy, she held successively—between 2003 and 2010—the positions of Secretary, Vice President, and President. She made history as the first woman serving as President of the Mexican Academy of Sciences. This prominent and influential position generated her determination to mobilize financial, governmental, and corporate support for the development of science as a national priority and to champion provisions for the admission of "Young Academics" to the Mexican Academy of Sciences, with a special attention to young women. Concurrently, she has embarked on collaborations with international organizations including the Organization of Ibero-American States in which she has acted as expert advisor on the subjects of education and science since 2009.

The latest national and international recognitions of Dr. Ruiz's professional journey include two Doctorates Honoris Causa, bestowed on her by the Autonomous University of Guerrero and the Latin American Institute of Educational Communication, respectively, both in 2024.

Let me now return to the professional and deeply personal bond that uniquely bridged—and mutually enriched—Dr. Francisco Ayala's and Dr. Rosaura Ruiz's shared passion about the wonder and benefit of knowledge that must not be constrained by disciplinary or political boundaries.

Co-authored by Rosaura Ruiz and Francisco J. Ayala, *El Método en las Ciencias: Epistemología y Darwinismo* (*The Method in Sciences: Epistemology and Darwinism*) was published in 1998. The book addresses epistemological questions: how scientific knowledge is acquired and justified, the manner in which scientists frame problems and their subsequent processes for re-

solving, altering, or discarding them. As the authors highlight, "the issue is important, since no other form of knowledge (philosophy, literature, art, religion) affects the social and economic life of modern humanity as radically and universally as science does" (Ruiz & Ayala, 1998, p. 7). The book's impact is evidenced by the fact that the publication of its first edition in 1998 was followed by subsequent editions (the third one in 2015).

Ruiz and Ayala partnered again as co-authors of a book they titled *De Darwin al DNA y el Origen de la Humanidad: La Evolución y sus Polémicas* (*From Darwin to DNA and the Origin of Humanity: Evolution and its Polemics*) which was published in 2002. In this publication, they jointly analyze the fundamental concepts of the modern theory of evolution and expose the principal controversies that surround it. The book is "about revealing, in the most synthetic way possible, how evolutionism has come to become what it is: the central theory of biology" (Ruiz & Ayala, 2002, p. 11).

Ibero-America became a core focus of Dr. Rosaura Ruiz's scholarly contributions, of her stewardship of international collaborations, and of her command of science diplomacy.

In 1997, she organized, under the sponsorship of UNAM, an international colloquium that was held in Cancún, Mexico, and yielded a broad perspective on Darwin's impact in the Spanish- and Portuguese-speaking worlds. The bridges-building spirit of that gathering of experts is mirrored in two books, both co-edited by Dr. Ruiz, whose publication bridged the Atlantic. Titled *El Darwinismo en España e Iberoamérica* (Glick, Ruiz & Puig-Samper, 1999) the Spanish-language version of the colloquium's addresses was published in Spain in 1999. Not surprisingly, it culminates with a joint contribution by Rosaura Ruiz and Francisco J. Ayala, named "El núcleo duro del Darwinismo" ("The hard nucleus of Darwinism"). The English version followed, published by Kluwer Academic Publishers in Boston in 2001, under the title *The Reception of Darwinism in the Iberian World: Spain, Spanish America and Brazil* (Glick, Puig-Samper & Ruiz, 2001).

As a founder and a member of the board of directors, Dr. Rosaura Ruiz has also been the driving force behind the International Network of the History of Biology and Evolution (RIHBE). This international web of expertise is comprised of prominent researchers from the Spanish National Research Council, the Museum of Astronomy and Related Sciences (Brazil), Universidad Andrés Bello (Chile), the Pontifical Catholic University of Ecuador, the National Council for Scientific and Technical Research (Argentina), the University of

Salamanca (Spain), and others. She has been a coordinator of several books that resulted from the International Colloquia on Darwinism in Europe and America organized by this work group.

I had the great pleasure of accompanying Francisco and, thus, reuniting with Dr. Ruiz, at the 6th of these international colloquia, held in Puerto Ayora in Ecuador's Galápagos Islands in May 2015. That allowed me to appreciate the extraordinary width and breadth—cross-disciplinary, cross-national, and cross-cultural—of the expert analyses that this event brought together and that provide the content of the book published by Ediciones Doce Calles in Spain in 2016 (Cubi, Sevilla, Ruiz & Puig-Samper, 2016). Addressing Darwinism's overlay with ethics, environmental conservation, anthropology, eugenics, politics, education, biological research, and other fields in both historical and contemporary perspectives and in the context of the United States, South America, and Europe, the colloquium, and the book it engendered, offer a formidable testimony to the power of insights that transcend disciplines and geographies.

The visionary German naturalist and explorer Alexander von Humboldt uniquely demonstrated the power of such ideas. His legendary work *Cosmos* was first published in the complete form in Spanish in Madrid in 2011 (Catarata/CSIC, 2011). It was during Dr. Ruiz's service as the head of the Secretariat of Education, Science, Technology and Innovation in Mexico City's Government, from 2018 to 2023, when a new magnificent edition of *Cosmos* was published in Mexico (Siglo XXI Editores, 2022). This colossal collaborative undertaking, which involved Dr. Ruiz and her Secretariat, the Government of the State of Mexico, UNAM, and other entities and experts, combines the crown jewel of Humboldt's immortal legacy as a scientist and humanist of intellectual and moral preeminence with important introductory segments written to magnify the relevance and enlightenment that his legacy carries for new generations. In her introduction, Dr. Ruiz highlights Humboldt's systematic sharing of the results of his expeditions with both the scientific community and general public, his philosophy of a holistic nature in which all is interrelated in a complex equilibrium, his exceptional capacity to understand the profound connection between the natural world and the human spirit, and his firm belief that the progress in science is fundamental to the wellbeing of humanity and, thus, that the benefits of science should be accessible to all nations.

The circumstance in which I received this book is an emotional and unforgettable tribute to Dr. Rosaura Ruiz's humanity. In early 2023, upon learning about Francisco's fast progressing illness, she flew to California to visit him in the hospital, to embrace him, and to bring him a gift—the *Cosmos* publication. He was too weak to hold or read it; I was deeply moved to accept it on his behalf and now cherish it for the special memory that envelopes its intellectual grandeur.

Dr. Ruiz: may the new chapter of your professional journey as Mexico's Secretary of Science, Humanities, Technology, and Innovation yield a bounty of intellectual, spiritual, and humanitarian gifts for Mexico, Ibero-America, and the entire world. I reiterate my congratulations to you as the Awardee of the 2025 Ayala Medal, with hope that the Medal will energize this noble prospect and stimulate our future encounters along bridges of knowledge built to foster human welfare and human progress by supporting the transnational identity and connectivity of planet Earth.

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