

## In Memoriam: Dr. Rut Collado de la Peña (1967–2015)



Our dear friend and colleague, Dr. Rut Collado de la Peña, passed away on 14 November 2015, in A Coruña, Galicia, Spain, at the age of 48.

She was an associate professor ("Profesora Contratada Doctora") and member of the Science Faculty within the Department of Animal Biology, Plant Biology and Ecology at the Universidade da Coruña, a Spanish public university in the city of A Coruña, in Galicia, northwestern Spain.

Rut is survived by her husband, Rüdiger M. Schmelz, and daughters Anna Schmelz Collado and Marta Schmelz Collado.

Rut was born and grew up in A Coruña, where she completed primary and secondary education. She studied biology at the Universidade de Santiago de Compostela. Rut received her PhD from the Universidade da Coruña in 1994, thesis title: "Oligoquetos acuáticos del cuadrante noroccidental de la Península Ibérica: Taxonomía, biología y ecología", [*Aquatic oligochaetes of the north-west of the Iberian Peninsula: taxonomy, biology and ecology*] directed by our colleague Enrique Martínez-Ansemil. In 1995 she obtained a Master's degree in "Gestión Medioambiental" (Environmental Management) from the Instituto de Investigaciones Ecológicas, Málaga, with her thesis entitled: Los lagos: contaminación y eutrofización. Impacto sobre las comunidades acuáticas y posibilidades de recuperación [*Lakes: contamination and eutrophication. Impact on aquatic communities and possibilities of recovery*].

Prior to her position as Profesora Contratada Doctora at the Universidade da Coruña (1998–2015), Rut pursued research in a postdoctoral position (1994–1996) at the Institute of Freshwater and Fish Ecology (Berlin, Germany), where she focused on oligochaetes occurring in littoral and profundal habitats of eutrophic and oligotrophic lakes. She then attained a research position (1996–1998) at the Universität Osnabrück (Osnabrück, Germany), where her research focused on developing the Enchytraeid Reproduction Test (ERT), in collaboration with the German company ECT Oekotoxikologie GmbH, Flörsheim, and on use of protein patterns (isozymes) as taxonomic markers.

Throughout her scientific career, Rut was involved in numerous cooperative projects focusing on the

ecology and taxonomy of aquatic and terrestrial oligochaetes (especially Enchytraeidae and Naididae). Her diverse focus on the taxonomy and systematics of enchytraeids and other oligochaete families, often in collaboration with others, resulted in the descriptions of 31 species new to science. These include four from watercourses in NW Spain, described in her PhD thesis: *Stylodrilus curvithecus* Collado *et al.*, 1993 (Lumbriculidae), *Mesenchytraeus lusitanicus* Collado *et al.*, 1993, *Krenedrilus realis* Martínez-Ansemil & Collado, 1996 (Tubificidae), and *Cernosvitoviella bulboducta* Martínez-Ansemil & Collado, 1996.

Six species of aquatic oligochaetes, collected from terrestrial sites, were described during her involvement with Project SHIFT (in the Amazonian rain forest, also in collaboration with ECT): *Pedonais crassifaucis* Collado & Schmelz, 2000 (Naididae), *Bothrioneurum righii* Collado & Schmelz, 2000 (Tubificidae), and *Pristina silvicola* Collado & Schmelz, 2000, *Pristina terrena* Collado & Schmelz, 2000, *Pristina marcusii* Collado & Schmelz, 2001, and *Pristina trifida* Collado & Schmelz, 2002 (all Naididae); 11 described during Project SOLOBIOMA in Brazil: *Achaeta becki* Schmelz & Collado, 2005, *Achaeta hanagarthi* Schmelz *et al.*, 2008, *Achaeta singularis* Schmelz *et al.*, 2008, *Achaeta paranensis* Schmelz *et al.*, 2008, *Guaranidrilus andreolii* Schmelz *et al.*, 2011, *Guaranidrilus cingulatus* Schmelz *et al.*, 2011, *Guaranidrilus hoeferi* Schmelz *et al.*, 2011, *Guaranidrilus marquesi* Schmelz *et al.*, 2011, *Xetadrilus fabryi* Schmelz *et al.*, 2011, *Xetadrilus maacki* Schmelz *et al.*, 2011, and *Xetadrilus aphanus* Schmelz *et al.*, 2011; and 10 described during other independent projects: *Enchytraeus luxuriosus* Schmelz & Collado, 1999, *Fridericia larix* Schmelz & Collado, 2005, *Bryodrilus hondurensis* Schmelz, 2015, *Hemienchytraeus phytotelmatius* Schmelz, 2015, *Achaeta coimbrensis* Schmelz & Collado, 2013, *Fridericia sousai* Schmelz & Collado, 2013, *Fridericia ciliotheca* Schmelz & Collado, 2013, *Fridericia sousai* Schmelz & Collado, 2013, *Fridericia roembkei* Schmelz & Collado, 2013, and *Fridericia marginata* Schmelz & Collado, 2013. A milestone was the book *A guide to European terrestrial and freshwater species of Enchytraeidae (Oligochaeta)*, published in 2010, together with her husband Rüdiger.

In addition to her independent and collaborative research projects, Rut was an instructor of classes in animal physiology, and assisted in the organization and presentation of lectures and preparation of classroom and lab practica during her professional career. Teaching was not a 'load' for her; she enjoyed teaching others as an opportunity rather than as an expectation, and took it very seriously. She resourcefully integrated newly published research results with her lectures and classroom materials.

In lab practica aligned with her classroom presentations, she substituted the black worm *Lumbriculus variegatus* for lethal experiments previously conducted using laboratory rats—following the initial designs and recommendations by our late colleague, Charlie Drewes (Drewes 2005). Students were very thankful for her commitment at all levels of teaching. Rut was a perennial member of our International Symposia on Aquatic Oligochaetes (ISAO) group, participating in several of our triennial meetings (either in person or as co-author of presentations).



**left:** Brenda Healy and Rut in front of the Flower Puppy (Topiary sculpture by Jeff Koons) in the outdoor terrace of the Guggenheim Museum during a city tour; **right:** Rut (far left) with Patty Gillis, René Hessling, Mark Wetzel, Mónica Joao de Barros Amorim, Regine Bönsch, Adrian Pinder, and Rüdiger Schmelz, during a mid-week social gathering on the patio of the University Colegio Mayor Miguel de Unamuno (symposium hotel); both pictures taken during the 8<sup>th</sup> ISAO meeting hosted by Pilar Rodríguez at the Universidad del País Vasco in July 2000.

Rut also was a member of the Société d'Histoire Naturelle de Toulouse and of the Sociedade Galega de Historia Natural. She liked horse-riding, was at ease with dogs from her early childhood and enjoyed reading good literature of all sorts, from D.F. Wallace, J.K. Toole, to G. García Márquez, Jane Austen, J.R.R. Tolkien, and others. She had a weakness for fantasy—including that presented in novels, movies and TV series; apart from a diverse library, her daughters as children had an almost complete collection of the then popular pre-teen and teenage movies and TV series at home. She was fluent in Spanish, Galician, German, English, and French. She loved Germany, but as a true Galician, was really most happy with her family in her hometown, A Coruña.



During each of the preceding international symposia on aquatic oligochaete biology, and by inclusion of memoria in our published proceedings, we have honored our deceased colleagues, mentors, and friends—those who have participated in our ISAO group meetings and those who have provided significant influence, insight, and direction for our own scientific endeavors. On behalf of our fellow oligochaetologists worldwide who have known Rut both personally and professionally and benefited from her sincere kindness, professional guidance, and scientific contributions, the ISAO14 organizing and scientific committees dedicate this 14th International Symposium on Aquatic Oligochaetes to the memory of our dear friend and colleague, Rut Collado de la Peña.

### Acknowledgements

The author extends his appreciation to Rut's husband, Rüdiger, to their daughters, Anna Schmelz Collado and Marta Schmelz Collado, to Enrique Martínez-Ansemil, and to the perennial members of the ISAO family for sharing some of the more personal and professional information presented in this memoriam.

### Publications of Rut Collado de la Peña [listed chronologically]

#### Primary publications

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