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## Obituaries: Polychaete researchers (2014–2016)

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One sad aspect of each International Polychaete Conference is the collation of obituaries for those friends and colleagues in the polychaete research world who have passed away in the intervening three years. Naturally, most will have retired (sometimes for many years!), though they may still be active in their research and often regular attendees at polychaete conferences. All will be greatly missed.

The authors in the obituary section of these Proceedings wish to pay tribute to the lives, contributions and personalities of 11 researchers who died between 2013 and 2016 (Table 1). All had made their mark and among their number are many major figures in polychaetology over the last 50 years or so, recognized for both their regional and international expertise and influence. Numerically, the losses were most marked in the Americas. South America lost three significant leaders -Edmundo Nornato (aged 93) from Brazil, José Mariá Orensanz (69) from Argentina, Franklin D. Carrasco (71) from Chile - and, tragically, also André Santos (32) a young Brazilian scientist of great potential. North America mourned Mary Petersen (76), Keith Woodwick (93), Judy Fournier (73), and lastly Kristian Fauchald (79) who was universally acknowledged as the most influential polychaete researcher of his generation. The remaining three were Roger Bamber (65) from England, Nechama Ben-Eliahu (79) from Israel, and Minoru Imajima (85) the long-standing leading polychaete researcher in Japan.

Four of the 11 have already been honoured through publication of obituaries or tributes, and their careers are briefly summarized here. Obituaries for the remaining seven are published in these Proceedings and follow this introduction.

Nechama Ben-Eliahu (Figure 1A) was a determined marine scientist famed for her studies of Lessepsian migrations and Serpulidae. She was a stalwart of the first 10 International Polychaete Conferences and well-known to all who attended, establishing many contacts and friendships. Regrettably, cancer deterred her from attending the 11th conference in Sydney, Australia, in 2013. Nechama died on 23 March 2014. Chipman & ten Hove (2014) wrote an insightful and personal account of Nechama's life from her birth in New York, USA, to her emigration to Israel in 1962 and subsequent establishment as one of the foremost polychaete researchers in the Middle East producing 46 publications.

José María Orensanz (Figure 1B), affectionately known as 'Lobo' since his childhood, died from a heart attack on 5 January 2015, as he was packing a van for a family fieldtrip to his beloved Patagonian coast. Lobo was a kind and

Corresponding author: A.S.Y. Mackie Email: andrew.mackie@museumwales.ac.uk generous man, and mentor to generations of students. He made a series of significant scientific contributions on the taxonomy of marine or estuarine annelids, as well as in benthic ecology and artisanal fisheries. Diez *et al.* (2015) wrote about his life from his birth in Mar del Plata, Argentina, through his exile in Mexico and the USA, to the return to his home country following the re-establishment of democracy, and his contribution to the study of South American polychaetes. His interest in polychaetes developed through encouragement and tuition from Dr Enrique Rioja. Lobo produced 37 publications on benthic ecology and polychaete systematics, naming nine genera and 29 species.

Roger Bamber (Figure 1C) was a larger than life marine systematist and ecologist. A multi-talented naturalist, he had a great intellect, while at the same time being a 'man of the people' and very sociable. Pycnogonids and tanaids were his main passion, but he worked on polychaetes also - describing one new genus (Baldia Garwood & Bamber, 1988) and three new species. He attended several International Polychaete Conferences. Roger passed away peacefully in his sleep on 16 February 2015, just over a year after being diagnosed with Motor Neurone Disease (Amyotrophic Lateral Sclerosis). The first obituary was published online (Vandepitte, 2015) in the news section of the World Register of Marine Species (WoRMS) as acknowledgement of his involvement with the database since its precursor - the European Register of Marine Species (ERMS). A special issue of Zootaxa was dedicated to honour his life and work (Horton et al., 2015). An obituary was published also in the Bulletin of the Porcupine Marine Natural History Society (Horton, 2015); Roger having been a member since its inaugural meeting in the Royal Scottish Museum (now National Museums Scotland), Edinburgh, on 13 February 1977. He was a prolific contributor, long-standing committee member, Honorary Editor (1985-1994) and more recently Honorary Secretary (2007-2015) of the Society. Roger made an outstanding contribution to the field of marine biology and systematics, publishing 218 scientific papers and describing 346 taxa.

Kristian Fauchald (Figure 2A) was the most highly influential polychaete systematist of his generation. He was kind, generous and inspirational to countless researchers. He authored 103 publications during 1961-2014 (Ward, 2016) including the famous 'Pink Book' (Fauchald, 1977) and *The Diet of Worms* (Fauchald & Jumars, 1979), and two ground-breaking companion works on polychaete systematics (Fauchald & Rouse, 1997; Rouse & Fauchald, 1997). A special publication of papers on polychaete research was published to honour Kristian on his 70th birthday (Rouse *et al.*, 2005). During his career, Kristian described 34 new genera and over 250 of his species' names remain valid (Read, 2016).

Researcher	Born – Died	Country	Obituaries & Tributes
Nechama Ben-Eliahu	4 January 1935–23 March 2014	Israel	Chipman & ten Hove (2014)
Edmundo Ferraz Nonato	1 June 1920–14 April 2014	Brazil	Lana et al.*
Mary Elizabeth Petersen	8 February 1938–7 July 2014	Denmark, USA	Blake*
José Mariá Orensanz	9 October 1945 – 5 January 2015	Argentina, USA	Diez et al. (2015)
Roger Norman Bamber	1 September 1949–16 February 2015	UK	Horton (2015); Horton <i>et al.</i> (2015)
Kristian Fauchald	1 July 1935–4 April 2015	Norway, USA	Salazar-Vallejo (2016); Mackie & Darbyshire (2016)
André Souza dos Santos	16 March 1983–2 October 2015	Brazil	Assis <i>et al.</i> *
Franklin Carrasco Vásquez	28 August 1944–29 December 2015	Chile	Soto*
Minoru Imajima	14 March 1930–13 March 2016	Japan	Sato-Okoshi*
Judith Anne Fournier	19 June 1943–1 July 2016	Canada	Gagnon <i>et al.</i> *
Keith Harris Woodwick	4 January 1927–1 November 2016	USA	Blake*

Table 1. Polychaete researchers who have passed away 2013-2016.

\*These Proceedings.

Kristian was a great advocate of the International Polychaete Conference and attended all 11 held between 1983 and 2013. He served as President of the International Polychaetology Association 1995–1998. In addition, he originated the *World Register of Polychaeta* which became the core of the *World Polychaeta Database* incorporated into WoRMS, with Kristian as a founding editor (Read & Fauchald, 2017).

Kristian died on 4 April 2015 following a heart attack the previous evening. A number of tributes rapidly appeared on the internet and a short obituary was published online on WoRMS (Pleijel & Rouse, 2015). These and many other tributes from family, friends, colleagues and students were included in the tribute volume compiled by Mackie & Darbyshire (2016) for the 12th International Polychaete Conference in Cardiff. A eulogy, similarly originally published online in 2015, appeared in print the following year (Salazar-Vallejo, 2016). An annual *International Polychaete Day* was inaugurated on 1 July 2015 (his birthday) to encourage events and social media activity worldwide, promoting polychaetes in Kristian's memory. A special session of 19 oral

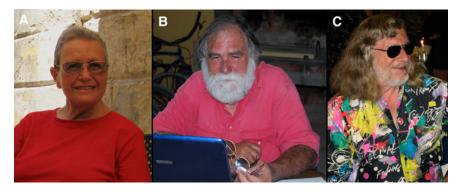


Fig. 1. (A) Nechama Ben-Eliahu, 10<sup>th</sup> International Polychaete Conference, Lecce, Italy, June 2010; (B) Lobo Orensanz at home in Puerto Madryn, Argentina, January 2010; (C) Roger Bamber, 9th International Polychaete Conference, Portland, Maine, August 2007. Image credits: (A) & (C), Andy Mackie; (B) Vasily Radashevsky.

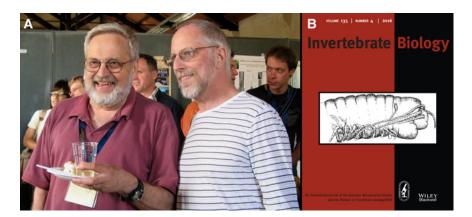


Fig. 2. (A) Kristian Fauchald and Len Hirsch, 10th International Polychaete Conference, Lecce, Italy, June 2010; (B) Front cover of *Invertebrate Biology* issue featuring contributions from a special session in honour of Kristian Fauchald at the 2016 annual meeting of the *Society for Integrative & Comparative Biology* in Portland, Oregon. Image credits: (A) Andy Mackie; (B) Smithsonian Scholarly Press & *Invertebrate Biology*, Wiley Blackwell.

and seven posters 'to celebrate Kristian's legacy as a systematist, taxonomist, teacher and mentor' was held at the 2016 annual meeting of the *Society for Integrative & Comparative Biology* in Portland, Oregon (3–7 January 2016). Eleven papers from this meeting were published subsequently in an issue of *Invertebrate Biology* (McHugh & Pernet, 2016). The cover of this publication featured Kristian's line drawing of *Eunice hirschi* Fauchald, 1972 (Figure 2B) – named for his husband Len Hirsch. Len was a regular participant in International Polychaete Conferences (Figure 2A), and sadly died a couple of months after Kristian on 12 June 2015.

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