

CURRICULUM VITAE
Dr Helen M. James Pr. Sci. Nat.

Professional Natural Scientist
Department of Freshwater Invertebrates
Albany Museum
Somerset Street
Grahamstown 6139
South Africa

Tel: +27 (0) 46 6222312
Fax: +27 (0) 46 6222398
h.james@am.org.za

Tertiary Education and Professional Association

- 2010. PhD [Freshwater Entomology] Rhodes University, Grahamstown. Systematics, phylogenetics and historical biogeography. (Conferred 2011)
- 1986. BSc (Hons.) [Entomology] Rhodes University, Grahamstown.
- 1985. BSc [Biological Sciences] Rhodes University, Grahamstown.

Membership of scientific societies and other professional involvements:

- Registered with The South African Council for Natural Scientific Professions (SACNASP) as Professional Natural Scientist, Zoological Science. Reg. No: 400267/11 (from July 2011).
- Honorary Research Associate of South African Institute for Aquatic Biodiversity (SAIAB) (from March 2010).
- Associated Researcher of Department of Zoology and Entomology, Rhodes University, and member of Rhodes University Science Faculty (from 28 July 2011).
- Eastern Cape assessor for National River Health Biomonitoring SASS (South African Scoring System) Program for DWA (from November 2006).
- Board Member: Society for Conservation Biology, Freshwater Working Group (from January 2016).
- Member, The Royal Society of South Africa (RSSA)
- Member, Southern African Association of Aquatic Scientists (SASAQS)
- Member, The Entomological Society of Southern Africa (ESSA)
- Member, International Society of Limnology (SIL)
- Member, Freshwater Biological Association (FBA), Windermere, UK.

Experience

- **January 2013 - present.** Senior Curator and Head of Department, Department of Freshwater Invertebrates, Albany Museum, Grahamstown, South Africa.
- **February 1988 – December 2013.** Museum Natural Scientist, Department of Freshwater Invertebrates, Albany Museum, Grahamstown, South Africa.
- **January 1986 June 1987.** Research Technician, Institute for Freshwater Studies, Rhodes University, Grahamstown, South Africa.
- Experience in research on freshwater, estuarine and marine ecosystems in Southern Africa and the South Atlantic Ocean.
- Involvement both on land and at sea in nutrient analysis of water using a Technicon III autoanalyser and primary production studies.
- Twenty nine years' experience in faunal surveys and the identification of freshwater macro-invertebrates.
- Specialisation in systematics, biogeography and evolutionary biology of freshwater insects, especially mayflies (Ephemeroptera).
- Proficiency in the assessment of water quality and conservation status of freshwater ecosystems.
- Writing funding proposals for research and museum curation projects.

Noteworthy Additional Skills Development

- Geometric morphometrics workshop, Chris Klingenberg, Manchester University, at the University of Stellenbosch, January 2014.
- Phylogenetic networks, Cape Town, December 2013.
- Scratchpads 2.0 Online Basic Training course completed through the Natural History Museum, London. May 2013.
- Workshop on DNA Barcoding and BOLD (Barcode of Life Database), South African Institute for Aquatic Biodiversity (SAIAB), Grahamstown. 3-5 May 2013.
- Workshop on using “R” statistical package, run by Dr Trevor Avery, Acadia University, Canada 2-24 April 2012, 8 sessions.
- Training in molecular analysis of organisms for elucidating phylogeny by world expert Dr Michael T. Monaghan at Leibniz-Institute of Freshwater Ecology, Müggelseedamm, Berlin, Germany. 27 July-13 August, 2009.
- Global Freshwater Animal Diversity Assessment (FADA) workshop, Bruges Belgium 3-8 December, 2008.
- Adobe Illustrator Course, Pretoria. 2 days August, 2008.
- Adobe Photoshop Course, Rhodes University Journalism Department. 12 sessions, 2007.
- Workshop on use of LUCID, a programme to generate electronic identification keys. Cape Town. 6-9 June, 2007.
- River Eco-classification workshop (East London). 22-24 August 2006.
- ArcView3.3 GIS, at Rhodes University, 12-15 December, 2005.
- IUCN SSC Training Workshop for the SAIAB freshwater biodiversity assessment of Southern Africa. 19-22 May, 2005.
- Ostracoda identification workshop (UCT) 1day, 2001.
- Geographical Information Systems (GIS) Rhodes University, Grahamstown (focussing on REGIS and Idrisi). 6 weeks, 1993.
- Chironomidae identification workshop (UCT) 1 day, 1992.
- Preliminary French, Rhodes University, Grahamstown 1 year, 1990.
- Database management workshop (DBase III) at Albany Museum, 2 weeks, 1988

Teaching Experience and Capacity Building

- Involvement with lecturing public and school groups, including annual teaching of school groups for museum outreach programs.
- Occasional running of professional workshops, or sections within workshops.
- Lecturing and running practicals at Rhodes University for undergraduate level (second and third year courses in Aquatic Entomology) for the past 20 years.
- Annual involvement with judging the Regional Schools Science Expo projects since 2001.

Student & post-doctoral supervision:

- 2007-2008: supervision of Rhodes University 3rd year student project, which continued at honours level.
- 2012: supervision of one BSc(Hons) and one MSc, and one undergraduate project.
- 2013: supervision of one MSc and one undergraduate project.
- 2014: supervision of one MSc and one PhD student.
- 2015: supervision of one MSc and one PhD student.
- 2016: graduated one MSc student (distinction) and one PhD student. Supervision of Rhodes University 3rd year and BSc(Hons) student projects; co-supervision of Wits University PhD student. Two post-doctoral fellows.
- 2017: Supervision of Rhodes University PhD, two BSc(Hons) and one 3rd year student projects; co-supervision of Wits University PhD student. One post-doctoral fellow.

Mentorship is also provided each year to various students not specifically under my supervision (from Rhodes University, Fort Hare University, Walter Sisulu University, University of Venda, University of Cape Town, University of the Witwatersrand-Johannesburg, University of Zimbabwe,

Delta State University, Nigeria).

Publications and Conference Presentations - Summary

Publications are under the name **Barber-James**, a combination of maiden and married surnames; author or co-author of 163 papers, chapters in books, reports, popular articles and conference presentations, comprising:

- 30 peer-reviewed publications (including peer-reviewed conference proceedings)
- 3 chapters in books
- 52 oral presentations or posters at international conferences (both overseas and local)
- 41 technical reports on applied freshwater research projects
- 36 popular articles or talks
- 2 book reviews

(Publication list provided on request).

Peer-reviewed 56 manuscripts by other authors for publications in international journals.

Awards and Grants

1991. Best poster paper presentation at the Annual conference of South African Association of Aquatic Scientists (SASAQS), Grahamstown.

2013. Co-author of best student oral paper at SASAQS conference, Arniston, Western Cape.

Grants Awarded:

See separate spreadsheet listing these.