

# Curriculum Vitae

## Gina Clarke

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### Professional Experience

2004 - to date                      Postdoctoral Research Associate, University of Illinois, Urbana, USA.  
2003 – 2004                        Ensis Ltd. University College London- Research scientist  
1998-1999                         Laboratory research technician, Environmental Change Research Centre,  
UCL.

### Education

2003	University College London, UK	Environmental Change Research Centre	Ph.D.
2002	Bergen University, Norway	Botanical Institute	Marie Curie Fellow
1999	University College London, UK	Environmental Change Research Centre	Masters of Research (Distinction)
1998	Oxford University, UK	Education Department (Geography)	P.Grad. Certificate Ed.
1997	Newcastle University, UK	Department of Geography	B.Sc. Honours (2:1)

### Research Contracts

2003-2004                      Environment Agency pilot lake monitoring network project to support the EU Water Framework Directive- Phytoplankton and epilithic diatom analyst  
  
Lake Baikal monitoring program (CONTINENT-[http://continent.gfz-potsdam.de/front\\_content.php](http://continent.gfz-potsdam.de/front_content.php)) – Phytoplankton analyst.  
  
Diatom Assessment of Loch and Lake Ecological Status (DALES [http://craticula.ncl.ac.uk/DARES/dales\\_project.htm](http://craticula.ncl.ac.uk/DARES/dales_project.htm))- Seasonal phytobenthos analysis  
  
2003- to date                      Trophic diatom Index – analysis and nutrient interpretation of river diatoms from UK waters. Funding bodies- Scottish Environmental Protection Agency, Plant-Soil Interface Scottish Crop Research Institute and Environment Agency, UK  
  
1999- to date                      European Mountain Lake Ecosystems: Regionalisation Diagnostics & Socio- Economic Evaluation project (EMERGE- <http://emergent.mountain-lakes.org/emerge/>)- Diatom data specialist.

### Publications

**G. Clarke**, M. Kernan, A. Marchetto, S. Sorvari and J. Catalan (2005) Using diatoms to assess geographical patterns of biological and limnological change in high-altitude European lakes from pre-industrial times to the present day. *Aquatic Sciences* 67: 224-236

Lydia King, **Gina Clarke**, Helen Bennion, Martyn Kelly, Marian Yallop. (2005) Sampling littoral diatoms in lakes for ecological status assessments: a literature review. Environment Agency ISBN: 1844324362 Email [Acquistions](mailto:Acquistions) © Environment Agency May 2005

Lydia King, **Gina Clarke**, Helen Bennion, Martyn Kelly and Marian Yallop (in press) Recommendations for sampling littoral diatoms in lakes for ecological status assessments. *Journal of Applied Phycology*.

#### Manuscripts in Preparation:

**Clarke, G. H.**, Henderson, A.C.G., Hu, F.S., and Shemesh, A. (in prep) Holocene Climatic variation at Ongoke Lake, SW Alaska as inferred from biogenic silica concentrations, diatom oxygen isotopes and sedimentary diatom assemblages. To be submitted to *Quaternary Research*

Henderson, A.C.G, Shemesh, A., **Clarke, G.H.**, and Hu, F.S., (in prep) Insolation- controlled Holocene climate in southern Alaska. To be submitted to *Geophysical Research Letters*

Martin Kernan, Jordi Catalan, Marc Ventura, Anton Brancelj, **Gina Clarke**, Gunnar Raddum, and Evzen Stuchlík (in prep) Environmental gradients and species distribution in remote European mountain lake ecosystems: bases for regionalisation and the evaluation of their ecological status. *Freshwater Biology; Special Issue*

Curtis C, Juggins S, Battarbee R.B, **Clarke G**, Kernan M (in prep). Regional differences in the drivers of diatom change in mountain lakes: spatial and temporal comparisons *Freshwater Biology: Special Issue*

#### *Other Publications:*

H. Bennion, G. **Clarke**, N. Rose and S. Theophile (2004) Sediment core study of Loch Langavat, Isle of Harris. ECRC Final Report to 'Marine Harvest'

A. Burgess, H. Bennion, **G. Clarke** (2005) Assessing reference conditions and ecological status for lakes using subfossil diatoms. Report to the Environment Agency, Contract No. SC030103. ECRC Report number 105

### **Conferences and presentations**

2005 **Clarke, G. H., Henderson, A. C. G., & Hu, F. S.** Evidence for Early-Holocene Warmth in Southwestern Alaska: Biogenic-silica, diatom-assembly, and diatom-isotope records from Ongoke Lake. AGU Fall Meeting, San Francisco. Poster

Henderson, A.C.G. **Clarke, G.H.**, Shemesh, A. & Hu F.S. A 12,000- year climatic record from biogenic-silica. AGU Fall Meeting, San Francisco. Oral.

2002 EMERGE Conference, Pallanza, Italy. Poster and co-ordination of the diatom numerical analysis workshop.

**Clarke, G. H., & Jones, V.J.** Diatoms and climate from central Norway. 26<sup>th</sup> Bern Botanical Excursion, Norway. Oral.

2001 EMERGE Conference, Copenhagen, Denmark. Co-ordination of the diatom taxonomy and data harmonisation workshop.

2000 British Diatomist meeting, Norfolk, UK. Oral

EMERGE Conference Bratislava, Slovakia. Co-ordination of the diatom sampling strategy workshop.

### **Teaching Experience**

2005 James Scholar undergraduate research project supervision (4 students)

1998-2003

- Numerical Analysis of Biological and Environmental Data- Natural Environment Research Centre (NERC) recognised short course, UCL. Numerical software practicals.
- Introduction to Diatom Analysis- NERC short course, UCL. Diatom Identification practicals.
- Masters in Quaternary Science, UCL - Demonstrating numerical practicals
- Undergraduate Tutor, Department of Geography, UCL.

### **Research Funding**

2003 Graduate school, UCL, conference fund. Funding for conference attendance, £205

2002 Botanical Institute Research award, Bergen. Funding for <sup>210</sup>Pb dating, £2,000

2000

- Mead Scholarship award. Funding for fieldwork costs, £200
- Graduate school, UCL. Funding for fieldwork costs, £865

### **Short Training Courses**

2002 Quantitative ecology and palaeoecology, Botanical Institute, Bergen.

2000 Numerical Analysis of Biological and Environmental Data, UCL.

1999

- Introduction to Diatom Analysis, UCL.
- Dendrochronology and Dendroclimatology, UCL.

### **Peer Reviewer**

Quaternary Research  
Journal of Paleolimnology  
Vegetation History and Archaeobotany