# Johan RENAUDIE

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### born in Sarlat-la-Canéda (France), July the 26th, 1983

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### **EDUCATION**

2013	Promotion (PhD) magna cum laude in Biology (Paleontology) at Humboldt-Universität, Berlin,
	Germany.
2007	Master (MSc) in Systematic, Evolution and Paleontology at Université Pierre et Marie Curie
	(UPMC) coaccredited with Museum National d'Histoire Naturelle and École Normale
	Supérieure, Paris, France.
2004	Licence (BSc) in Earth and Space Sciences at Université Paul Sabatier, Toulouse, France.
2003	DEUG in Earth and Universe Sciences at Université Paul Sabatier, Toulouse, France.
2001	Baccalauréat in Science (Mathematics) at Lycée Pré de Cordy, Sarlat-la-Canéda, France.

### RESEARCH EXPERIENCE

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2015–17	PostDoc research project (DFG grant RE3470/3-1) at the Museum für Naturkunde (MfN) on
	'Diatoms, Radiolarians and the Cenozoic Silicon and Carbon cycles'.
2014–15	PostDoc research project at MfN with D. B. Lazarus and H. Pälike on 'Earthtime-EU: Integrated deep-sea microfossil chronostratigraphic database, website and analytic tools'.
2008–12	PhD research project (DFG grant LA1191/8-1,2) at MfN, Berlin with D. B. Lazarus and B. Mohr on a 'Synthesis on Antarctic Neogene radiolarians: taxonomy, macroevolution and biostratigraphy'.
2007	MSc research project at UPMC with T. Danelian and S. Saint-Martin on 'Siliceous plankton paleoecology in the tropical Atlantic in relation with Middle Eocene climatic changes'.
2006	MSc research project at UPMC with T. Danelian on 'Radiolarian diversity and taphonomy during the critical warming interval of the Paleocene-Eocene boundary'.

### **PUBLICATIONS**

# Peer-reviewed articles

Peer-reviewed	articles
2016	Renaudie J. Quantifying the Cenozoic marine diatom deposition history: links to the C and Si cycles. <i>Biogeosciences</i> , 13(21), 6003-6014.
	Wiese R., Renaudie J., Lazarus, D.B. Testing the accuracy of genus-level data to predict species diversity in Cenozoic marine diatoms. <i>Geology</i> , 44(12), 1051-1054.
	Renaudie J., Lazarus D.B. New species of Neogene radiolarians from the Southern Ocean - Part IV. <i>Journal of Micropalaeontology</i> , 35(1), 26-53.
2015	Renaudie J., Lazarus D.B. New species of Neogene radiolarians from the Southern Ocean - Part III. <i>Journal of Micropalaeontology</i> , 34(2), 181-209.
2014	Lazarus D.B., Barron J., Renaudie J., Diver P., Türke A. Cenozoic diatom diversity and correlation to climate change. <i>PLoS ONE</i> , 9(1), e84857.
2013	Renaudie J., Lazarus D.B. New species of Neogene radiolarians from the Southern Ocean - Part II. <i>Journal of Micropalaeontology</i> , 32(1), 59-86.
	Renaudie J., Lazarus D.B. On the accuracy of paleodiversity reconstructions: a case study in antarctic radiolarians. <i>Paleobiology</i> , 39(3), 491-509.
2012	Renaudie J., Lazarus D.B. New species of Neogene radiolarians from the Southern Ocean. Journal of Micropalaeontology, 31(1), 29-52.
2010	Renaudie J., Danelian T., Saint-Martin S., Le Callonec L., Tribovillard N. Siliceous phytoplankton

# **Submitted**

2017 Lazarus D.B., Renaudie J., Lenz D., Diver P., Klump J. Raritas and Raritas Vox: programs for counting high diversity categorical data with highly unequal abundances. Submitted to PLoS ONE.

response to a Middle Eocene warming event recorded in the tropical Atlantic (Demerara Rise, ODP Site 1260A). Palaeogeography, Palaeoclimatology, Palaeoecology, 286, 121–134.

## **INVITED TALKS**

2016 University of Leeds, UK: Diatoms, climate and the marine Silicon cycle. November, 10th.

CONGRESS PARTICIPATIONS Talks				
2017	InterRad 15th meeting in Niigata, Japan: Renaudie J., Fontorbe G., Lazarus D., Salzmann S., Frings P., Conley D., Testing the vital effect on silicon isotope measurements in Late Eocene Pacific radiolarians.			
2016	Lyell Meeting of the Geological Society in London, UK: Lazarus D., Renaudie J., Diver P., The NSB (Neptune) Database: current status and future development.			
2015	InterRad 14th meeting in Antalya, Turkey: Renaudie J., Lazarus D.B., Diatoms, radiolarians and the Cenozoic Si and C cycles; Lazarus D.B., Renaudie J., Reconstructing radiolarian diversity: what we don't know; and a new analysis of the Cenozoic.			
2014	EGU general meeting in Vienna, Austria: Renaudie J., Lazarus D.B., A quantitative review of Cenozoic diatom deposition history.			
2013	TMS Silicofossil Group meeting in Cambridge, UK: Renaudie J., Lazarus D.B., Cenozoic history of marine diatom deposition: a quantitative review.  Deutscher Museumsbund Fachgruppe Dokumentation Herbsttagung in Berlin-Dahlem, Germany: Renaudie J. (on behalf of Lazarus D.B.), Taxonomic backbone databases for fossil and living			
2012	marine microplankton.  InterRad 13th meeting in Cadiz, Spain: Renaudie J., Lazarus D.B., On the accuracy of paleodiversity reconstructions: a case study using Antarctic Neogene radiolarians.  Jubiläumstagung der Paläontologische Gesellschaft in Berlin, Germany: Renaudie J., Lazarus D.B., Macroevolutionary patterns in Antarctic Neogene radiolarians.  TMS annual meeting in Nottingham, UK: Renaudie J., Lazarus D.B., Toward an high-resolution stratigraphy for Antarctic Neogene radiolarians.			
2011	TMS Silicofossil Group meeting in Lille, France: Renaudie J., Lazarus D.B., Macro-evolutionary patterns in Antarctic Neogene radiolarians.			
2007	Congrès de l'Association Française de Paléontologie in Dignes-les-Bains, France: Renaudie J., Danelian T., Saint-Martin S., Eocene diatoms in tropical Atlantic (ODP Leg 207) and climate changes.			
Posters				
2017	<ul> <li>Kolloquium der DFG-Schwerpunkte ICDP/IODP in Braunschweig, Germany: Renaudie J.,</li> <li>Fontorbe G., Drews EF., Böhne S., Lazarus D., Constraining the history of the Cenozoic marine silicon cycle with siliceous microfossils.</li> <li>Evolution 2017 in Portland, Oregon: Renaudie J., Lazarus D., Diver P., The NSB (Neptune) marine microfossil occurrences database.</li> </ul>			
2016	Kolloquium der DFG-Schwerpunkte ICDP/IODP in Heidelberg, Germany: Renaudie J., Siliceous microfossils and the Cenozoic marine carbon and silicon cycles; Renaudie J., Diver P., Lazarus D., NSB and ADP: a new, expanded and improved software system for marine planktonic microfossil and geochronologic data; Wiese R., Renaudie J., Lazarus D., Can genera be used as proxies for species in studies of biodiversity-climate sensitivity? A test using Cenozoic marine diatoms.  International Conference on Paleoceanography in Utrecht, Netherlands: Renaudie J., Quantifying the Cenozoic marine diatom record; Renaudie J., Lazarus D., Diver P., Expanding the NSB database for paleoceanographical research.			
2015	Kolloquium der DFG-Schwerpunkte ICDP/IODP in Bonn, Germany: Renaudie J., Diatoms and the Cenozoic Si and C cycles.  Geological Society of America (GSA) annual meeting in Baltimore, USA: Renaudie J., Diver, P., Lazarus, D., NSB: a new, expanded and improved database of marine planktonic microfossil data.			
2014	Kolloquium der DFG-Schwerpunkte ICDP/IODP in Erlangen, Germany: Renaudie J., Lazarus D.B., A quantitative review of Cenozoic diatom deposition history.  EGU general meeting in Vienna, Austria: Lazarus D.B., Renaudie J., Diversity history of Cenozoic marine siliceous plankton.			
2012	Vallaguium day DEC Cabusaynunkta ICDD/ICDD in Evaibaya Caymany. Danaydia I. Lazayya			

Kolloquium der DFG-Schwerpunkte ICDP/IODP in Freiberg, Germany: Renaudie J., Lazarus

Kolloquium der DFG-Schwerpunkte ICDP/IODP in Kiel, Germany: Renaudie J., Lazarus D.B.,

D.B., Toward an high-resolution stratigraphy for Antarctic Neogene radiolarians.

Macroevolutionary patterns in Antarctic Neogene radiolarians.

2013

2012

InterRad 13th meeting in Cadiz, Spain: Renaudie J., Lazarus D.B., Advances in Antarctic Neogene radiolarian high-resolution stratigraphy; Lazarus D.B., Renaudie J., Taxonomic documentation of Southern Ocean Neogene radiolarians.

TMS annual meeting in Nottingham, UK: Renaudie J., Lazarus D.B., Macroevolutionary patterns in Antarctic Neogene radiolarians.

2011 Kolloquium der DFG-Schwerpunkte ICDP/IODP in Münster, Germany: Renaudie J., Lazarus D.B., Paleodiversity reconstructions in Antarctic Neogene radiolarians

2010 Kolloquium der DFG-Schwerpunkte ICDP/IODP in Frankfurt, Germany: Renaudie J., Lazarus D.B., Weinkauf M., Marine micropaleontology, round two: whole faunal surveys and their use in biostratigraphy and macroevolutionary research.

Third International Paleontological Congress in London, UK: Renaudie J., Lazarus D.B., Macroevolutionary patterns in Antarctic Neogene radiolarians.

Kolloquium der DFG-Schwerpunkte ICDP/IODP in Potsdam, Germany: Lazarus D.B., Renaudie J., Synthesis and analysis of Antarctic Neogene Radiolaria.

InterRad 12th meeting in Nanjing, China: Lazarus D.B., Renaudie J., Synthesis on Antarctic Neogene Radiolaria: preliminary results.

Paleontological Association 51st Annual Meeting in Uppsala, Sweden: Renaudie J., Danelian T., Saint-Martin S., The siliceous plankton response of the equatorial Atlantic to the Middle Eocene Climatic Optimum event (ODP Site 1260, Demerara Rise, off Surinam).

Paleontological Association 50th Annual Meeting in Sheffield, UK: Danelian T., Renaudie J., Blanc-Valleron M.-M., The radiolarian record of the equatorial Atlantic during the Paleocene/Eocene Thermal Maximum event.

### **IN-HOUSE TALKS**

Wissenschaftstag 'Taxonomie': Micropaleontology, between taxonomic backbone databases and alpha taxonomy. May, 31st.

### **WORKSHOP PARTICIPATIONS**

'Access to Geosciences: sharing and publishing data related to paleontological, mineralogical, and petrological objects using a common data standard' workshop at MfN.

2010 'Paleobiology Database Intensive Workshop in Analytical Paleobiology' at Macquarie University, Sydney, Australia.

### **PUBLIC OUTREACH**

'Tiefenzeit Geschichten der Zukunft: von Plankton, Muscheln und Klimawandel' booth at the MfN during the Lange Nacht der Wissenschaften.

2011 Guided tour of the MfN Micropaleontology Collection during the Lange Nacht der Museen.

## OTHER SCIENTIFIC OUTPUTS

#### **Softwares**

2017	NSB_ADP_wx	Age-Depth plot maker in Python, available on github.
2016	Raritas	Micropaleontological counting software in Python, available on
		github.

#### **GRANTS & AWARDS**

#### **Grants**

2015–17 DFG Grant RE3470/3–1: 'Eigene Stelle' grant in the Priority Program 527 (IODP).

#### **Awards**

2012 TMS Student Prize for best Poster at InterRad 13th meeting in Cadiz, Spain.

# **SERVICES TO PROFESSION**

Reviews for *Paleoceanography*; *Palaeogeography*, *Palaeoclimatology*, *Palaeoecology*; *Paleobiology*. Co-founder and current organizer of the MfN 'Code Clinic' Programming Club. Current maintainer of the Neptune Database (NSB, http://nsb-mfn-berlin.de).

#### WORK EXPERIENCE

11/2015–05/2017 Postdoctoral researcher (DFG) at the MfN.

03/2014-06/2015	Postdoctoral researcher (Earthtime-EU) at the MfN.
05/2013-07/2013	Programmer at the MfN for the Neptune Database web interface.
11/2008-09/2012	Scientific assistant at the MfN.
10/2007-07/2008	Library assistant at the Bibliothèque Centrale of Université Paris VII.

## PROFESSIONAL MEMBERSHIP

European Geosciences Union (EGU); International Association of Radiolarian Paleontologists (InterRad); The Micropalaeontological Society (TMS)

# **OTHER**

Fluent in English and French (native), intermediate level in Latin and German.

Advanced programming skills in R, python (incl. Django and wxPython) and postgreSQL (and other SQL derivatives), intermediate level in LaTeX. Familiar with Unix shell and Apache Webserver.