Stéphan JACQUET, PhD, male, 50 years old

Research director (INRAE)
Member of various scientific committees
Animator of the BIOTIC research axis at CARRTEL
Head of a MASTER teaching module
European Advanced Scientific Diver
President of the French Association for Limnology



Last update: July 2021

Education history

2010-now: Research director, INRAE, France, aquatic microbial ecology

2005: Defense of the enpowerment to supervise research, University Savoie, France

2001–2010: Young researcher, INRAE, France, aquatic microbial ecology

2000-2001: Post-Doc, University of Bergen, Norway, ecology of viruses of microalgae

1997 to 1999: During the PhD, Courses, Worksop and experiences at field in Canada, Norway and Denmark

1996-2000: PhD, University Paris VI, France, dynamics of marine picoplanktonic populations

1995-1966: Master of oceanography, University Paris VI, France

Current position

2010-now - Research director, Lab. CARRTEL / Department AQUA / INRAE / France We do not work as team or group. However, since 2020, I supervise the main axis research theme of my lab. dealing with biodiversity and biotic interactions. I do not have any more PhD students (the last one defended in March, 2021) but 3 PhDs are included in this axis.

Previous position

2001-2010: Young researcher, Lab. CARRTEL / Department AQUA / INRAE / France

2000-2001: Postd-Doc researcher, University of Bergen / Department of Microbiology / Norway

1996-2000: PhD, University Paris VI / Biological Station of Roscoff / CNRS / France

Fellowships and awards

2000-2001: Individual European Marie Curie Fellowship, University of Bergen / Department of Microbiology / Norway

2001: Price for the best PhD work awarded by the Britany region

1996-2000: Individual PhD Fellowship, Ministry of Research / University Paris VI (Biological Station of Roscoff) / France

1998: Jacque Poutiers Price of the most original work in biological Oceanography as a PhD student awarded by the French Association of Oceanography

Supervision of graduate students and postdoctoral fellows

All my PhD students continued with a post-doc position or obtained a job All my MASTER degree students continued with PhD or integrated a job

2002-2022: 6 post-docs / 6 PhD students / 30 Master degree students / 10 others. University Savoie Mont Blanc / INRAE-CARRTEL / France

The PhD work of Kevin Xu ZHONG was awarded by the EFFS as the best European PhD work on freshwater sciences in 2015 for the period 2013-2015

Post-doc

- 2022: XXX, CIPEL (co-supervisor)
- 2019: Jonathan Derot, JSPS/CNRS, Shimane University, Japan (co-supervisor)
- 2012: Onur KERIMOGLU, University Savoie Mont Blanc fellowship, CARRTEL, France (co-supervisor)
- 2011: Parvathi AMMINI, Depart. EFPA fellowship, INRA, CARRTEL, France
- 2008-2010: Ludwig JARDILLIER, Haigneré fellowship, INRA, CARRTEL, France
- 2002: Jean-François BRIAND, EFPA fellowship, INRA, CARRTEL, France (co-supervisor)

PhDo

- 2017-2021: Jade EZZEDINE, INRA & University Savoie Mont Blanc fellowship, CARRTEL, France (8 publications)
- 2010-2014: Xu ZHONG, regional fellowship, CARRTEL, France (price of the best European PhD work on freshwater sciences awarded by EFFS, 11 publications)
- 2009-2013: Samira BEN RHONDAME, INSTM, Sfax, Tunisie (co-supervisor)
- 2006-2010, Lyria BERDJEB, INRA & University Savoie Mont Blanc fellowship, CARRTEL, France (8 publications)
- 2005-2009: Anne ROLLAND, Eaux de Paris fellowship, CARRTEL, France (4 publications)
- 2003-2007: Sébastien PERSONNIC, University Savoie Mont Blanc fellowship, CARRTEL, France (6 publications)

Masters2

- 2021, Alexia PELLOUX
- 2021, Chloé FELTIN
- 2020, Adrian JANICOT
- 2019, Gaetan PAVARD
- 2018, Nina GRANDREMY
- 2017, Etienne RICHY
- 2016, Benoit PAIX
- 2015, Quentin REYMANN
- 2014, Baptiste GUDONI
- 2014, Jérémy FONVIELLE
- 2013, Antony MEUNIER
- 2011, Méryl POLLION
- 2009, Isabelle CHEVALLOT
- 2008, Aude PRUNET
- 2008, Rozenn THOMAS
- 2006, Lyria BERDJEB
- 2005, Bérengère LITTOT
- 2005, Maria CELLAMARE
- 2004, Solange DUHAMEL
- 2003, Sébastien PERSONNIC
- 2003, Abdourahmane MBADE SENE
- Others (Master1, Maîtrise, CDD, Stage ingénieur, MOO, BTS)
- 2021 & 2022, Oscar PEILLEX
- 2019 & 2020, Marine GARDILLON
- 2008, Anne-Sophie REYMOND
- 2004, Romain BIGO et Romain JOOSERAND
- 2004, Kim DAMEVIN
- 2004, Solange DUHAMEL
- 2004, Bérengère TITTOT
- 2002, Carine MAISONNETTE

Teaching activities

Since 2015, head of the teaching module "lacustrine systems" for the MASTER-2 ECOMONT of University Savoie Mont Blanc, two complete week of teaching) every year

2021: Teacher at summer school Thonon – bio-indication, INRAE CARRTEL / France

2019: Teacher at summer school Bourget – ecological surveys, University Savoie / France

2014: Teacher at summer school Evian – lake ecology, INRA CARRTEL / France

Organisation of scientific meetings

2002-...: Convenor of the cycle of seminaries of the lab. since 2002 (now also via a youtube chanel), CARRTEL, France

2005: Convenor, 1st European Workshop on Aquatic Phage Ecology / 90 part. / France

2006: Convenor, 1st national meeting about Lake Bourget / 120 part. / France

2005-2009: Convenor, aquatic virus network meetings each year for 3 years / 50 part. / France

2010: Convenor, International days of Limnology / 180 part. / France

2012-2014-2016-2018-2022: Member of the scientific committee of the International Days of Limnology and Oceanography / 100 part.

2018: Member of the scientific committee of the International Symposium of big lakes, Evian, 350 part.

Reviewing activities

2001-...: Regular reviewer for >20 different journals & of scientific proposals for a variety of organisations (e.g. European Science Foundation, National Switzerland Fund, Dutch Research Council, Ministry of Luxembourg, Agence Nationale de la Recherche)

2010-...: Member of the Editorial Board of Advances in Oceanography and Limnology

2013-...: member of the reviewing Board of Microbial Ecology

2014-...: member of the reviewing Board of Frontiers in Microbiology

2021: Writer of the congress EFFS label and judge of oral and poster presentations at SEFS

2022-...: Chief Editor of *International Journal of Limnology*

Membership of scientific societies

2007-...: Associated Member of the French Association of Limnology, vice-president from 2009 to 2019, President from 2020

2009-...: Associated member of the national committee of scientific diving, repr. INRAE and secretary

2015-...: Member of the scientific committee of the Museum of Lake Geneva (Nyon, Switzerland), President of the aquarium group

2017---: Member of the scientific committee of the Chablais UNESCO Geopark

2017-...: President of the scientific and ethic committee of the Association Longitude 181

2017: Co-founder and secretary of the Association Leman Passion

2018: Member of the scientific committee of AQUALIS (Aix-les-Bains), of the ecomuseum of Lake Geneva (Thonon)

2018-...: Member of the international Global Lake Ecological Observatory Network

2018-...: Member of the PHAGE network

2020-...: Member of the scientific committee des Espaces Naturels de Haute Savoie (natural habitats)

2021-...: Founder and national repr. of the INRAE scientific diving network

2021-...: Member of the AND'O and restoration networks

Research grants - past and present funding

2002-2003: Assessing cyanophage diversity in lake / FRM / 10 KE / PI

2003: Assessing microbial abundances using FCM / INRA & UdS / 55 KE / PI

2004: Virulake project / EC2CO / 25 KE / co-PI

2006-...(each year): Ecological monitoring of Lake Bourget / Water agency RMC/ 45 KE / Coordinator

2007-2008: Parasites of microalgae / Région / 45 KE / co-PI

2008-2011: Virus-bacteria interactions in aquatic systems / ANR / 100 KE / co-PI

2009-2011: Ecology of bacteria and viruses / EFPA INRA & UdS / 100 KE / PI

2013: CARAVIR projet / University Savoie Mont-Blanc / 3 KE / PI

2014: Picoplanktonic production / University Savoie Mont-Blanc / 2.5 KE / PI

2015: VIRAGE, Virus characterisation / University Savoie Mont-Blanc / 3 KE / PI

2017-2021: C-BALO, University Savoie Mont-Blanc & INRAE / 135 KE / PI

2019: Sorting cells / CNOC & ANAEE / 140 KE / Coordinator

2019: MYSILAC et PICOMIL projects / 60 KE / ECLA / PI

2020: MYSILAC et PICOMIL projects / 22 KE / ECLA / PI

2021: MYSILAC et PICOMIL projects / 25 KE / ECLA / PI

2021: FISHING BALO, University Savoie Mont-Blanc / 2.5 KE / PI

Institutional responsibilities

2002-...: Creator and animator of the internal seminar cycle

2002-2006: Associate member of the scientific committee of the depart. of Ecology at INRA

2003-2007: Co-animator of a research group at CARRTEL and of the starting lake observatory project

2006-...: Member of the scientific committee of Lake Bourget

2009-...: Member of the faculty committee, section of population biology (University Savoie Mont-Blanc)

2019-...: Repr. of young researchers and research directors at CARRTEL

2020-...: Animator of the research axis BITOIC at CARRTEL

2020-2024: Member of the scientific committee of the depart. INRAE AQUA and of the evaluation panel board of INRAE

2021-...: Diving repr. for INRAE

Major collaborations

By past, I had the chance to work with colleagues from a variety of countries (US, UK, Austria, Japan, Norway, Denmark, Monaco, Holland, UK, Israel, Switzerland, Italy, Canada, India, etc...). With the ABBA project, a part of the work is imagined with German, Swiss and Israeli collaborators. Only a few names are provided below:

Monaco: C Ferrier-Pagès (coral microbial ecology)

Norway: G Bratbak, F Thingstad, (viral and microbial marine ecology)

Austria: M Weinbauer, P Peduzzi (viral ecology)

Denmark: M Middelboe, H Havskum (microbial and phytoplankton ecology)

Italy: R Danovaro (aquatic viral ecology)

Japan: T Miki, H Yajima (viral ecology or cyanobacterial bloom and modelisation)

Switzerland: M Beniston (Cyanobacterial bloom and modelisation)

US: WKW Li, M Landry, KM Karl, R Noble, S Wilhelm (aquatic plankton ecology)

UK: W Wilson (aquatic viral ecology)
India: P Ammini (viral diversity)

Canada: C Suttle (aquatic viral ecology)

Israel: E Jurkevitch (BALO)

Short overview of publication record

Concerning peer-reviewed articles

From Web of Science: 113 publications; 4817 citations; h-index = 39

From Frontiers loop: 116 publications; 4887 citations; 7200 views; I have more publications than

98% of all Loop authors

From Scopus: 115 publications, 4887 citations: h-index = 41

From Google scholar: 107 publications; 7936 citations; h-index = 49; i10-index = 92 Moreover, I also publish many other secondary articles, book chapters, reports, etc ... (>150) During the past 5 years, I published >30 reviews, articles or book chapters I am writing two books (on marine viruses and on limnology)

Top 10 publications from recent years

This is a short selection for recent years, all as leader and/or corresponding author

- Ezzedine J.A., L. Jacas, Y. Desdevises and S. Jacquet. 2020. *Bdellovibrio* and like organisms in Lake Geneva: An unseen elephant in the room? *Frontiers in Microbiology* 11 article 80
- Paix, B., J. Ezzedine and S. Jacquet. 2019. Diversity, dynamics and distribution of Bdellovibrio and like organisms in peri-alpine lakes. *Applied and Environmental Microbiology* 85:e02494-18
- Zhong, X., C. Suttle, E. Derelle, Y. Desdevises, A.-C. Baudoux, J. Colombet, C. Six and S. Jacquet. 2018. A new freshwater cyanosiphovirus harbouring integrase. *Frontiers in Microbiology* 9 article 2204
- Pollet T, L Berdjeb, C Chardon and S Jacquet. 2018. Contrasting temporal patterns in ammonia oxidizing archaeal community dynamics in two neighbouring deep peri-alpine lakes. *Aquatic Microbial Ecology* 81:95-108
- Gallina N., M. Beniston and S. Jacquet. 2017. Estimating future cyanobacterial occurrence and importance in lakes: a case study with *Planktothrix rubescens* in Lake Geneva. *Aquatic Sciences* 79:249–263
- Parikka K. J., M. Le Romancer, N. Wauters and S. Jacquet. 2017. Deciphering the virus-to-prokaryote ratio: Insights into the virus-host relationships in a variety of ecosystems. *Biological Reviews* 92:1081-1100
- Anneville, O., I. Domaizon, O. Kerimoglu, F. Rimet and S. Jacquet. 2015. Blue-greens in a "greenhouse century"? New insights from field data of climate change impacts on cyanobacterial abundance. *Ecosystems* 18:441-458
- Jacquet, S., O. Kerimoglu, F. Rimet, G. Paolini and O. Anneville. 2014. Cyanobacterial bloom termination: the disappearance of *Planktothrix rubescens* from Lake Bourget after restoration. *Freshwater Biology* 59:2472-2487
- Zhong, X. and S. Jacquet. 2014. Contrasting diversity of phycodnavirus signature genes in two large and deep western European lakes. *Environmental Microbiology* 16:759-773
- Zhong, X., J. Colombet, A.S Pradeep Ram and S. Jacquet. 2014. Variations in abundance, genome size, morphology, and functional role of the virioplankton of Lakes Annecy and Bourget over a one-year study. *Microbial Ecology 67:66-82*
- Berdjeb, L., T. Pollet, C. Chardon and S. Jacquet. 2013. Spatio-temporal changes in the structure of archaeal communities in two deep freshwater lakes. *FEMS Microbiology Ecology 86:215-230*