

# Stéphan JACQUET, PhD, male, 50 years old

Last update: July 2021

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

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## Education history

2010–now: Research director, INRAE, France, aquatic microbial ecology  
2005: Defense of the empowerment 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, Workshop and experiences at field in Canada, Norway and Denmark  
1996–2000: PhD, University Paris VI, France, dynamics of marine picoplanktonic populations  
1995–1996: 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: Postdoc 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 Brittany region  
1996–2000: Individual PhD Fellowship, Ministry of Research / University Paris VI (Biological Station of Roscoff) / France  
1998: Jacques 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 EFS 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)

#### PhDs

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 EFS, 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 CARRETEL / France

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

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

### Organisation of scientific meetings

2002-...: Convenor of the cycle of seminars of the lab. since 2002 (now also via a youtube chanel), CARRETEL, 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 EFS 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 Lemans 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