Stéphan JACQUET, PhD, male, 53 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
Editor-in-Chief of the *International Journal of Limnology*



Last update: Sept 2024

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 co-supervise the main axis research theme of my lab. dealing with biodiversity and biotic interactions.

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

2002-2024: 7 post-docs / 7 PhD students / >30 Master degree students and 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

2024-2026: Frédéric SOULIGNAC, INRAE, CARRTEL, France

2024: Laura SOARES, INRAE, CARRTEL, France (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

2024-2027: Alice MARQUET, ENTPE

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

2024, Erwin REYMONDET & Leana REVIRAND

2023, Sirine MELLITI

2021, Alexia PELLOUX

2021, Chloé FELTIN

2020, Adrian JANICOT

2019, Gaétan 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)

2022, Hervé ROGISSART

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 2020: Scientific diving teacher for the divers of the INRAE diving network I created 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

2012-2014-2016-2018-2022-2024: 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 representative 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

2022: MYSILAC-2 / 65 KE / ECLA / PI

2023: MYSILAC-3 / 39 KE / ECLA / PI

2023: INRAE scientific diving network / 3 KE / Convener

2024: INRAE scientific diving network / 3 KE / Convener

2024: QUAGRA / CIPEL & AQUA / 22 KE / PI

2024: QUALACSED / USMB / 8.5 KE / PI

2024-2026: ACOULAC / 30 KE / PI

2024-2026: ALGA / Interreg / 550 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-...: Co-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 representative 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...). 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, B Ibelings (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), I Laurion (allelopathy)

Israel: E Jurkevitch (predatory bacteria)

Short overview of publication record

Concerning peer-reviewed articles

From Web of Science: 113 publications; 6175 citations; h-index = 45

From Frontiers loop: 141 publications; 1297 views; I have more publications than 92% of all Loop

authors

From Scopus: 128 publications, 6438 citations: h-index = 45

From Google scholar: 123 publications; 9735 citations; h-index = 53; i10-index = 103

Selection of 10 publications from recent years

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

Rogissart, H., V. Frossard, J. Guillard, C. Rautureau and S. Jacquet. 2024. Tracking the real-time behavior of *Hemimysis anomala's* winter swarms using acoustic camera. *Journal of Great Lake Research* 50(1):102250

Jacquet, S. 2023. Are warm temperatures the key factor to prevent *Hemimysis anomala* winter swarms in peri-alpine lakes? *Knowledge and Management of Aquatic Environments* 424:14

Ezzedine, J.A., A. Janicot, S. Rasconi, I. Domaizon and S. Jacquet. 2022. Short-term dynamics of *Bdellovibrio* and Like Organisms in Lake Geneva in response to a simulated climatic extreme event. *Microbial Ecology* 84:717–729

Moiron, M., C. Girel, F. Rimet and S. Jacquet. 2021. Die hard in Lake Bourget! The case of *Planktothrix rubescens* reborn. *International Journal of Limnology* 57:19

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

Derot, J., H. Yajima and S. Jacquet. 2020. Advances in forecasting harmful algal blooms using machine learning models: A case study with *Planktothrix rubescens* in Lake Geneva. *Harmful Algae* 99 article 101906

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

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

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