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University of Oxford  
Departments of Zoology & Biochemistry  
New Biochemistry Building  
South Parks Road  
Oxford OX1 3QU  
United Kingdom

## RESEARCH INTERESTS

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- Interference competition in bacteria
- Microbial cooperation
- Virulence evolution
- Social evolution

## ACADEMIC HISTORY

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**Postdoctoral Researcher**, Department of Zoology, University of Oxford, United Kingdom 11/2017 – present  
Advisor: Prof. Kevin Foster

**Ph.D.**, Life Science Zurich Graduate School, University of Zurich, Switzerland 6/2013 – 9/2017  
Thesis title: "Evolution of cooperation and virulence in an opportunistic pathogen"  
Advisor: Prof. Rolf Kümmerli

**Master of Science**, Microbiology and Immunology, ETH Zurich, Switzerland 9/2011 – 4/2013  
Master Thesis in Microbiology (grade 6.0 - „excellent“)

**Bachelor of Science**, Biology, LMU Munich, Germany 9/2008 – 6/2011  
Bachelor Thesis in Microbiology (grade 1.0 - „excellent“)

## PUBLICATIONS

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Rezzoagli C, **Granato ET**, Kümmerli R. Harnessing bacterial interactions to manage infections: a review on the opportunistic pathogen *Pseudomonas aeruginosa* as a case example.  
*Journal of Medical Microbiology* (*in press*)

**Granato ET\***, Meiller-Legrand TA\*, Foster KR. The Evolution and Ecology of Bacterial Warfare.  
*Current Biology* (2019) doi: 10.1016/j.cub.2019.04.024 (\*equal contribution)

Rezzoagli C, **Granato ET**, Kümmerli R. *In vivo* microscopy reveals the impact of *Pseudomonas aeruginosa* social interactions on host colonization.  
*The ISME Journal* (2019) doi: 10.1038/s41396-019-0442-8

**Granato ET**, Ziegenhain C, Marvig RL, Kümmerli R. Low spatial structure and selection against secreted virulence factors attenuates pathogenicity in *Pseudomonas aeruginosa*.  
*The ISME Journal* (2018) doi: 10.1038/s41396-018-0231-9

**Granato ET**, Kümmerli R. The path to re-evolve cooperation is constrained in *Pseudomonas aeruginosa*.  
*BMC Evolutionary Biology* (2017) doi: 10.1186/s12862-017-1060-6

## PUBLICATIONS (cont.)

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**Granato ET**, Harrison F, Kümmerli R, Ross-Gillespie A. Do Bacterial “Virulence Factors” Always Increase Virulence? A Meta-analysis of Pyoverdine Production in *Pseudomonas aeruginosa* as a Test Case. *Frontiers in Microbiology* (2016) doi: 10.3389/fmicb.2016.01952

Kümmerli R, Santorelli L, **Granato ET**, Dumas Z, Griffin AS, West SA. Co-evolutionary dynamics between public good producers and cheats in the bacterium *Pseudomonas aeruginosa*. *Journal of Evolutionary Biology* (2015) doi: 10.1111/jeb.12751

## CONGRESS PRESENTATIONS

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| Microbiology Society Annual Conference, Edinburgh, United Kingdom<br><i>Oral presentation (upcoming)</i>  | 4/2020 |
| International $\mu$ BOx Meeting at Oxford – Universities of Basel, Switzerland & Oxford, United Kingdom<br>Poster presentation                            | 9/2019 |
| 17 <sup>th</sup> Congress of the European Society for Evolutionary Biology (ESEB), Turku, Finland<br><i>Oral presentation</i>                             | 8/2019 |
| International Meeting on Phenotypic Heterogeneity and Sociobiology of Bacterial Populations (SPP1617), Hohenkammer, Germany<br><i>Poster presentation</i> | 3/2019 |
| 17 <sup>th</sup> International Symposium on Microbial Ecology (ISME), Leipzig, Germany<br><i>Poster presentation</i>                                      | 8/2018 |
| 1 <sup>st</sup> International TRANSIT workshop on Cross-disciplinary Research, York, United Kingdom<br><i>Oral presentation</i>                           | 4/2018 |
| 16 <sup>th</sup> Congress of the European Society for Evolutionary Biology (ESEB), Groningen, Netherlands<br><i>Oral presentation</i>                     | 8/2017 |
| 116 <sup>th</sup> General Meeting of the American Society of Microbiology (ASM), Boston, USA<br><i>Poster presentation</i>                                | 6/2016 |
| Behaviour, Ecology, Environment and Evolution Meeting, University of Zurich, Switzerland<br><i>Oral presentation</i>                                      | 3/2015 |
| 15 <sup>th</sup> Congress of the European Society for Evolutionary Biology (ESEB), Lausanne, Switzerland<br><i>Poster presentation</i>                    | 8/2015 |
| Evolutionary Medicine Conference, Zurich, Switzerland<br><i>Oral presentation</i>   | 7/2015 |
| 15 <sup>th</sup> International Symposium on Microbial Ecology (ISME), Seoul, South Korea<br><i>Poster presentation</i>                                    | 8/2014 |
| Workshop in Evolutionary Biology, Guarda, Switzerland<br><i>Oral presentation</i>   | 6/2014 |

## SCHOLARSHIPS AND AWARDS

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SNF Postdoc Mobility Fellowship [82'500 CHF]	4/2019
<i>The ISME Journal</i> Cover Art Competition 2018, Top 3 Finalist	8/2018
SNF Early Postdoc Mobility Fellowship [81'750 CHF]	11/2017
ASM Student and Postdoctoral Travel Award [750 USD]	3/2016
Student Oral Presentation Award (Evolutionary Medicine Conference, Zurich)	7/2015
Research Fund of the University of Zurich (Forschungskredit) [86'000 CHF]	1/2016 – 2/2017
Scholarship of the German National Merit Foundation [12'000 EUR]	9/2011 – 4/2013
Award for graduating in the top 10% of class, Bachelor of Science, LMU Munich, Germany	6/2011

## TEACHING ACTIVITIES

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<b>Course organizer</b> , Experimental Evolution Organization and execution of a yearly 2-weeks laboratory course for undergraduate students; grading of written reports; supervision of four teaching assistants. Department of Zoology, University of Oxford	2/2019- present
<b>Teaching assistant</b> , Evolutionary Microbiology Organization and execution of a yearly 4-weeks full-time laboratory course for Bachelor and Master students; grading of written and oral reports. Faculty of Science, University of Zurich	2/2014 – 4/2017
<b>Teaching assistant</b> , General Microbiology Assistance in execution of a 2-weeks full-time laboratory course for Bachelor students, marking of final exams. Department of Biology, LMU Munich	3/2010

## COURSEWORK AND TRAINING (selection)

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<b>Mentorship Training</b> (4 hours) Department of Zoology, University of Oxford, United Kingdom	10/2019
<b>Public Engagement with Research</b> (2 hours) Department of Zoology, University of Oxford, United Kingdom	2/2019
<b>Advanced Microscopy Course</b> (20 hours) Micron Advanced Imaging Facility, University of Oxford, United Kingdom	11/2017
<b>Mentorship Training</b> (30 hours) Life Science Zurich Graduate School, Zurich, Switzerland	1/2016
<b>Logic and Reasoning for Scientists</b> (30 hours) Life Science Zurich Graduate School, Zurich, Switzerland	3/2015

## **COURSEWORK AND TRAINING (cont.)**

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<b>Voice Training and Presentation Skills</b> (30 hours) Center for Advanced Training, Zurich, Switzerland	5/2014
<b>Project Management for Research</b> (30 hours) Center for Advanced Training, Zurich, Switzerland	10/2013
<b>Leadership Skills</b> (30 hours) Center for Advanced Training, Zurich, Switzerland	11/2013

## **SUPERVISION AND MENTORING**

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<b>Mentoring Program, Department of Zoology</b> , University of Oxford, United Kingdom Co-development of a mentoring program between postdoctoral researchers and PhD students Regular mentoring activity	11/2019- present
<b>PhD Mentoring Program, Life Science Graduate School Zurich</b> Mentoring of junior PhD students Annika Hausmann, Arturo Rinaldi, Weronika Barcik	6/2014 – 9/2017
<b>Supervision of laboratory internship</b> Isa Moreno	1/2015- 4/2015

## **INSTITUTIONAL AND SUPPORT ACTIVITIES**

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<b>FutureProfs</b> , Department of Biochemistry, University of Oxford, United Kingdom Development of a peer-to-peer support group among postdoctoral researchers aiming for an academic career	11/2019- present
<b>Early Career Researcher Network</b> , University of Oxford, United Kingdom Organization of scientific, social, and training events for early career researchers Social Media & Outreach Representative	9/2018 – present
<b>Committee for Appointment of Faculty</b> , University of Zurich, Switzerland Representative for mid-level faculty	2017

## **OUTREACH**

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<b>SkypeAScientist</b> Skyping with class rooms around the world as part of the SkypeAScientist initiative.	4/2019 - present
<b>Twitter</b> Active Twitter profile with >2400 followers, regular interactions with general public & dissemination of scientific content.	2010 - present
<b>ScienceJam</b> , Department of Zoology, University of Oxford, United Kingdom Organization of - and participation in - a departmental "science jam" event where researchers presented their work in an accessible and creative way	5/2019

**OUTREACH (cont.)**

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<b>Oxford Scientist school</b>	1/2019
Guest judge for science writing competition for Secondary school pupils	
<b>Teaching on Twitter</b>	10/2018
Lecturer for the 1 <sup>st</sup> worldwide online open access microbiology course (“EUROmicroMOOC”) Preparation and delivery of online lecture on “Bacterial cooperation”, accessible to a general audience via Twitter.	
<b>‘Bacterial World’ Exhibition</b>	10/2018
Contribution of microscopy images to exhibition in the Natural History Museum of Oxford	
<b>UNIQ Summer School</b>	8/2018
Demonstrator for practical classes on antibiotics, delivered to state school students. Department of Biochemistry, University of Oxford, United Kingdom	
<b>Science Lab Zurich</b>	2/2017
Organization and execution of guided tour through microbiology laboratories for Swiss high school students. Faculty of Science, University of Zurich, Switzerland	
<b>International Physics Olympiad</b>	7/2016
Organization and execution of guided tour through microbiology laboratories for international high school students. Faculty of Science, University of Zurich, Switzerland	
<b>Info Day Biology</b>	3/2012
Oral presentation of Master in Biology at ETH to Swiss high school students. Department of Biology, ETH Zurich, Switzerland	
<b>Open Day Biochemistry</b>	10/2010
Assisting in presentation of biochemistry research to the general public. Max-Planck-Institute of Biochemistry, Martinsried, Germany	

**PEER REVIEW ACTIVITY**

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**Journals**

- mBio
- ISME
- PLOS ONE
- Microbiology
- Biofilm
- FEMS Microbial Ecology

**Grant applications**

- Swiss National Science Foundation

**PERSONAL SKILLS**

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Languages:	German (native) English (fluent) Dutch (beginner) French (beginner)	Digital Competences:	MS Office Suite R, MatLab Adobe InDesign Mendeley Reference Manager ZEN imaging software FIJI image analysis software
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