

PROF. DR. ANDREAS BOLAND

PERSONAL INFORMATION

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<https://scholar.google.co.uk/citations?user=6Vvsl-cAAAAJ&hl=en&oi=sra>

EDUCATION

01/2009 - 01/2014 **Ph. D. in Biochemistry**
Max Planck Institute for Developmental Biology, Tübingen, Germany
“Structural characterisation of eukaryotic mRNA decay factors”
Advisor: Prof. Dr. Elisa Izaurralde († 30th April 2018)
Awarded with distinction (summa cum laude).

11/2007 – 12/2008 **Research for degree thesis (Diplomarbeit) in Biology**
Leibniz Institute for Age Research, Jena, Germany
Advisor: Prof. Dr. Christoph Englert
“Characterisation of the + and –KTS isoforms of the tumour suppressor protein WT1”

EMPLOYMENT HISTORY

12/2018 - now **Assistant Professor at the University of Geneva**
Department of Molecular and Cellular Biology
University of Geneva, Sciences III, Geneva, Switzerland

01/2014 – 10/2018 **Postdoc as EMBO and Marie Skłodowska-Curie fellow**
Advisor: David Barford laboratory, Division of Structural Studies
MRC Laboratory of Molecular Biology (LMB), Cambridge, United Kingdom

APPROVED RESEARCH PROJECTS / AWARDED GRANTS AS PRINCIPAL INVESTIGATOR

2024 – 2026 **CryoEM of medical relevant GPCR targets using camelid single-chain antibodies.**
Helmut Horten foundation, single applicant. 300'000 CHF (**currently evaluated**)

2023 – 2027 **Deciphering the molecular mechanisms underlying chromosome segregation.**
Swiss National Science Foundation (SNF), “Swiss ERC Starting grant”, single applicant.
1'155'788 CHF

2023 **Faster and deeper: acquisition of a Falcon 4i camera with Selectris X for high-end cryo-microscopy at DCI Geneva.**
SNF, upgrade of the DCI-Geneva, main applicant.
1'000'000 CHF and 1'000'000 CHF matching funds as joint effort.

2022 – 2024 **Deciphering the molecular mechanisms underlying chromosome segregation.**
Swiss Cancer League, single applicant.
363'050 CHF

2022 **Solving the cryoEM structure of the μ -opioid receptor bound to a nanobody antagonist.**
Fondation Ernest Boninchi, Co-applicant with Prof. Miriam Stöber.
50'000 CHF

2022 **Hybrid pixel detector for electron microscope Talos LC120.”**
SNF, establishing microED at cryogenic, Co-applicant.
71'370 CHF

- 2019 – 2023 **Structural studies of cytokine-mediated signal transduction.**
SNF, sole applicant.
530'880 CHF
- 2019 **Mechanisms of leptin-mediated cell signalling.**
Fondation Ernst et Lucie Schmidheiny, single applicant.
19'000 CHF
- 2019 **Structural studies of cell cycle regulatory proteins.**
Novartis Foundation for Medical-Biological Research, single applicant.
55'000 CHF

In total (as main applicant): ≈ 3.3 Mio CHF.

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

2019 – now	PhD candidates:	Anna Höfler, Lina Poulain, Sophia Schmidt, Li Yao
	Postdoctoral scientists:	Jun Yu, Xuefeng Zhang, Margherita Botto, Elda Bauda Andrea Švorinić
	Technicians:	Caroline Gabus, Yvan Pfister

SCIENTIFIC REVIEWING ACTIVITIES

2021 – now	Reviewer for the journals Nature, Nature Structural & Molecular Biology (NSMB), Structure, Communications Biology, Protein Science and Molecular Biotechnology.
2021 – now	Reviewer for a project grant of the Swiss National Science Foundation (SNSF)
2021 – now	Reviewer for a project grant of the Medical Research Council (MRC), UK

MEMBERSHIPS IN SCIENTIFIC SOCIETIES

2020 – now	Member of "LS2 Life Science Switzerland"
2012 – now	Member of "Gesellschaft für Biochemie und Molekularbiologie e.V." (GBM)

FELLOWSHIPS AND AWARDS

01/2023 – 12/2027	Selected for the EMBO Young Investigator Program (YIP)
03/2016 – 02/2018	Marie Skłodowska-Curie postdoctoral fellowship. Horizon 2020 programme
06/2014 – 02/2016	European Molecular Biology Organization (EMBO) Long-term fellowship
01/2014 – 05/2014	Career developmental fellowship (CDF) from the MRC-LMB
01/2009 – 01/2014	Predocotrinal fellowship at the MPI Tübingen

SELECTED CONFERENCE PARTICIPATIONS / SEMINARS IN 2022 - 2024

05/2024	“Structural and functional characterization of drivers of eukaryotic cell cycle progression” (EMBO YIP Lecture, Roscoff), Invited Speaker
01/2024	“Using cryoEM to visualize drug targets (EMBO workshop Heidelberg), Invited Speaker
01/2024	“The molecular mechanisms of human separase regulation” Oxford University, Invited Speaker
01/2024	Seminar at the Wellcome Centre Cell Biology (University of Edinburgh), Invited Speaker
05/2023	“Using cryoEM to visualize (small) drug targets (Human Technopole), Invited Speaker
05/2023	“Using cryoEM to visualize (small) drug targets (EMBO YIP conference), Invited Speaker
03/2023	“Visualising the complex dynamics of biological membranes”, Tel Aviv, Invited Speaker
10/2022	The cell cycle: One engine – many cycles, EMBO workshop, Konstanz, Invited Speaker
09/2022	Genome organisation by SMC complexes, Edinburgh, Invited Speaker
09/2022	5 th Austrian CRYO-EM SYMPOSIUM, Vienna, Invited Speaker
06/2022	DCI Symposium, Geneva + Lausanne, Organiser
01/2022	BZMB-Kolloquium, Bayreuth, Invited Speaker

TEACHING ACTIVITIES

2022 – now	Scientific Writing and Communication
2022 – now	Biochimie pour biologistes (méthodes)
2022 – now	Master Course in Genetics, Development and Evolution (GDE)
2021 – now	Biochimie III
2019 – now	Molecular Biosciences PhD course