



List of SERI-funded ERC Starting and Consolidator Grants

Information as of 3 January 2023 - Please note that this list is not conclusive and is being updated continuously, starting with the newest projects.

➤ SERI-funded ERC Starting Grants

| Acronym | Full title | Principal Investigator/ Institution | EU |
|---------------|--|--|-----------|
| DryCO2 | Mechanisms of gas-driven mineral weathering in a changing climate | HARRISON Ana University of Bern | 1'658'388 |
| SPREAD | Globalized trade and the accidental spread of invasive species | BERTELSMEIER Cleo University of Lausanne | 1'515'915 |
| I'M AGEING | Integrated Microphysiological-omic approach to identify blood proteins reverting vascular AGEING | BERSINI Simone Università della Svizzera italiana | 2'647'966 |
| E-CONVERT | Three-terminal particle-exchange heat engines for efficient energy conversion at the nanoscale | PERRIN Mickael Lucien Swiss Federal Laboratories for Materials Sciences and Technology (Empa) & Swiss Federal Institute of Technology Zurich (ETHZ) | 2'003'582 |
| CoGS | Collective Guilt and Shame | MATHESON Benjamin University of Bern | 1'658'664 |
| Strong-H-cQED | Hybrid Circuit Quantum Electrodynamics in the Strong and Ultra-Strong Coupling Regime | SCARLINO Pasquale Swiss Federal Institute of Technology Lausanne (EPFL) | 2'211'252 |
| MorphoReg | Spatio-temporal dynamics of mechano-chemical signalling in zebrafish bone regeneration | DE SIMONE Alessandro University of Geneva | 1'659'299 |



| Acronym | Full title | Principal Investigator/ Institution | EU |
|------------------|---|--|-----------|
| XrayConnectomics | Connectivity constraints of attractor-like dynamics and fundamental computations in neuronal circuits | WANNER Adrian Paul Scherrer Institut | 1'659'299 |
| MOANA | Mechanistic model simulations of the marine biological carbon pump | LAUFKOETTER Charlotte University of Bern | 1'659'162 |
| ASSISTED | Assisted Dying in European Writing and Visual Culture: Reciprocal Interactions between Law, Medicine, and the Arts since 2000 | ELSNER Anna Magdalena University of St-Gallen | 1'658'126 |
| DARKSKIES | Measuring the self-interaction cross-section of dark matter with all-sky surveys | HARVEY David Swiss Federal Institute of Technology Lausanne (EPFL) | 1'647'224 |
| COOLCCAT | COherent Operation of a Logical Concatenated CAT qubit | GRIMM Alexander Paul Scherrer Institut | 2'762'856 |
| MitoControl | Mitochondria-driven redox control of motivational drives | KEMPF Anissa University of Basel | 1'650'362 |
| IMPOSSIBLE | Impossibility Results in Computational Complexity | GÖÖS Mika Swiss Federal Institute of Technology Lausanne (EPFL) | 1'648'111 |
| GEOSYM | Harnessing Geometry and Symmetry in Optimization for DataScience | BOUMAL Nicolas Swiss Federal Institute of Technology Lausanne (EPFL) | 1'645'555 |
| ARTISTE | Anomalous non-Reciprocal Topological networks for robuST microwavE devices | FLEURY Romain Swiss Federal Institute of Technology Lausanne (EPFL) | 1'658'971 |
| FoBEx | Food Webs and Biodiversity Change in an Extreme World | THAKUR Madhav University of Bern | 1'658'747 |



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|----------|---|---|-----------|
| VoICOPE | Climate impact and human consequences of past volcanic eruptions | HUHTAMAA Heli University of Bern | 1'618'243 |
| SAND | Smart and Autonomous Neurostimulation Devices for Chronic Neurological Disorders | SHOARAN Mahsa Swiss Federal Institute of Technology Lausanne (EPFL) | 1'658'039 |
| FIREPATH | Dynamic microstructural MRI to track the full path of neuronal activity across the human brain | JELESCU Ileana Lausanne University Hospital (CHUV) | 1'659'300 |
| 2ATMO | Production of Secondary Atmospheres | SOSSI Paolo Swiss Federal Institute of Technology Zurich (ETHZ) | 1'900'125 |
| TENSE | Irregular solutions of the Transport, Euler and Navier-Stokes Equations | COLOMBO Maria Swiss Federal Institute of Technology Lausanne (EPFL) | 1'544'974 |
| CURATE | CURATE: The data practices of European law enforcement and border control | LEESE Matthias Swiss Federal Institute of Technology Zurich (ETHZ) | 1'651'067 |
| TRIDENT | Rigorous and Practical Joint Analysis of Data Processing and Machine Learning: Theory and Systems | ZHANG Ce Swiss Federal Institute of Technology Zurich (ETHZ) | 1'656'489 |
| STRESSIG | Heritability of stress receptor signatures in the germline Father-Son-Talks | GAPP Katharina Swiss Federal Institute of Technology Zurich (ETHZ) | 1'658'491 |
| TAILSS | Tools from AI for Law and Social Science | ASH Elliott Swiss Federal Institute of Technology Zurich (ETHZ) | 1'659'300 |



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EU Framework Programmes

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|---------------------|---|--|-----------|
| META-MORPHOSIS | Identifying how life cycle variation tras biodiversity in changing environments over time and space | FABRE Anne-Claire University of Bern | 1'657'710 |
| HEALTHSENSE | Wearable health monitors enabled by flame-aerosol engineering | GUENTNER Andreas Swiss Federal Institute of Technology Zurich (ETHZ) | 1'658'161 |
| DriveTransformation | Understanding the Molecular Machines Driving Natural Transformation | HOSPENTHAL Manuela Swiss Federal Institute of Technology Zurich (ETHZ) | 1'659'300 |
| TransMed | Transparent Machine Learning in Medicine: development and application of interpretable and explainable models | VOGT Julia Swiss Federal Institute of Technology Zurich (ETHZ) | 1'658'864 |
| CULTURES ADAPT | Animal culture under change: a landscape-level analysis of socio-cognitive responses to human impact | APLIN Lucy University of Zurich | 1'659'079 |
| PROMISE | Proactive Microarchitectural Security | RAZAVI Kaveh Swiss Federal Institute of Technology Zurich (ETHZ) | 1'658'806 |



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Federal Department of Economic Affairs,
Education and Research EAER
**State Secretariat for Education,
Research and Innovation SERI**

Swiss Confederation

EU Framework Programmes

➤ **SERI-funded ERC Consolidator Grants**

| Acronym | Full title | Principal Investigator/ Institution | Direct funding by SERI (CHF) |
|----------------|---|---|---------------------------------|
| CASCOFEM | Cavity QED with Strongly Correlated Fermionic Matter | DONNER Tobias Swiss Federal Institute of Technology Zurich (ETHZ) | 2'206'035 |
| SafeAI | SafeAI: Certified Safe, Fair and Robust Artificial Intelligence | VECHEV Martin Swiss Federal Institute of Technology Zurich (ETHZ) | 2'206'600 |
| DEBATE | Deciphering the role of B cells and antibodies during tuberculosis | KING Carolyn University of Basel | 2'201'864 |
| PROFEM | Improving Female Migrants' Labour Market Positioning – An Intersectional Approach to Occupational Segregation Processes Across Countries and Over Time. | STEINMETZ Stephanie University of Lausanne | 2'099'693 |
| FiatLux | A Complete View of Galaxies at Cosmic Dawn | OESCH Pascal University of Geneva | 2'206'558 |
| GeneREPAIR | Establishing DNA double-strand break independent genome editing approaches to treat monogenetic brain disorders | SCHWANK Gerald University of Zurich | 2'205'996 |
| mifeePs | Decoding microbiota feedbacks on plants | SCHLAEPPI Klaus University of Basel | 2'206'600 |
| CavitySuperTop | Cavity-induced superconductivity and topological states of matter | KLINOVA Jelena University of Basel | 2'163'888 |
| RACE-GO | Rapid Active Coronagraphy of Exoplanets from a Ground Observatory | KUEHN Jonas Guillaume University of Bern | 2'762'939 |



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| AI-PERCEIVE | Robust Human-centric Computer Vision for Advanced AI-Agents | HILLIGES Otmar Swiss Federal Institute of Technology Zurich (ETHZ) | 2'212'400 |
| Lipo Trace | Tracing single-cell Lipidomes | D'ANGELO Giovanni Swiss Federal Institute of Technology Lausanne (EPFL) | 2'069'704 |
| ISAC | Integrated Structural Analysis of the Centriole | GUICHARD Paul University of Geneva | 2'177'638 |
| QEDMaterial | Cavity Quantum Materials Electrodynamics | CAVIGLIA Andrea University of Geneva | 1'999'257 |
| ProbQuant | Probability and complex quantum systems | KNOWLES Antti University of Geneva | 2'148'601 |
| TuLiP | Developing the Chemistry for Tunable Liquid Metal Nanoparticles towards Reconfigurable Materials | BUONSANTI Raffaella Swiss Federal Institute of Technology Lausanne (EPFL) | 2'480'889 |
| Cys-Code | Unmasking context-specific functional protein cysteines in living systems: understanding spatiotemporal stress signaling and precision ligand-target design | AYE Yimon Swiss Federal Institute of Technology Lausanne (EPFL) | 2'206'600 |
| deTermINT | Premature termination of RNA polymerase II transcription: From mechanism to molecular basis of gene specificity | JONAS Stephanie Swiss Federal Institute of Technology Zurich (ETHZ) | 2'206'600 |
| DDisQS | Driven and Dissipative Quantum Simulators | BRANTUT Jean-Philippe Swiss Federal Institute of Technology Lausanne (EPFL) | 2'186'514 |



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| ProteusDrone | Meta-morphic tri-modal mobility for robotics (ProteusDrone) | KOVAC Mirko Swiss Federal Laboratories for Materials Sciences and Technology (Empa) | 2'196'190 |
| COLLABORO | Adaptive history of human socio-cognitive development | MIGLIANO Andrea University of Zurich | 2'206'321 |
| muEDM | Search for the muon electric dipole moment using the frozen-spin technique | SCHMIDT WELLENBURG Philipp Paul Scherrer Institut | 2'189'735 |
| SVEN | Raphe-to-habenula — a serotonin subsystem for valence encoding | MAMELI Manuel University of Lausanne | 2'206'350 |
| POTCO | Polyhedral Techniques in Combinatorial Optimization | SVENSSON Ola Swiss Federal Institute of Technology Lausanne (EPFL) | 1'894'123 |
| TDP-43 transitions | Analysis of structure-function transitions of TDP-43 for mechanistic understanding of neurodegenerative diseases | POLYMENIDOU Magdalini University of Zurich | 2'203'617 |
| EXPAT | Experiments on Particles in Turbulence across Scales and Regimes | COLETTI Filippo Swiss Federal Institute of Technology Zurich (ETHZ) | 3'298'055 |
| cryOcean | Cryo-Electron Tomography for the Ocean: Molecular Architecture and Photosynthetic Adaptation of Marine Algae | ENGEL Benjamin University of Basel | 2'205'282 |
| SenseLife | Remote sensing of living organisms with full Stokes spectro-polarimetry | DEMORY Brice Olivier University of Bern | 2'200'670 |
| Epi-Mnemo | DNA-templated mechanisms of memory storage | GRAEFF Johannes | 2'206'577 |



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|-------------|--|---|---------------------------------|
| | | Swiss Federal Institute of Technology Lausanne (EPFL) | |
| MechanoBody | Mechanical Optimization of Non-antibody Binding Scaffolds | NASH Michael University of Basel | 2'205'262 |
| NEQS | Neural Quantum Simulation | CARLEO Giuseppe Swiss Federal Institute of Technology Lausanne (EPFL) | 2'206'600 |
| CANWAS | Canopy Waves - Volatile Information Transfer Across Multiple Plants | ERB Matthias University of Bern | 3'146'612 |