

## European Framework projects at the University of Bern (status 31 August 2024)

### Horizon Europe

#### Abbreviations - Programme

EIC: European Institute of Innovation & Technology

EDCTP3: European & Developing Countries Clinical Trials Partnership 3

ERC: European Research Council

SERI: State Secretariat for Education, Research and Innovation

WIDERA: Widening Participation and Strengthening the European Research Area

MSCA: Marie Skłodowska-Curie Actions

- GF: Global Postdoctoral Fellowship

- DN: Doctoral Network

#### Abbreviations - Project Type

IA: Innovation Action

JU: Joint Undertaking

RIA: Research & Innovation Action

Pillar	UniBE Coordinator or single PI	Programme and Project Type	Faculty	Institutional Unit	Last Name (Fellow / Co-PI)	First Name (Fellow / Co-PI)	Acronym	Project Title
1 Excellent Science		Infrastructure HE	-	Universitätsbibliothek Bern	Verdicchio	Dirk	CRAFT-OA	Creating a Robust Accessible Federated Technology for Open Access
1 Excellent Science		ERC Consolidator Grant	NAT	Institut für Theoretische Physik/ CERN	Monni	Pier	JANUS	Opening new frontiers in multi-scale evolution of scattering events: a dual pathway to precision
1 Excellent Science		ERC Synergy Grant	NAT	Departement für Chemie, Biochemie und Pharmazie	Arenz	Matthias	DEMI	Directed Evolution of Metastable Electrocatalyst Interfaces for Energy Conversion
1 Excellent Science		Infrastructure HE	MED	Institut für Physiologie	Petrovici Senn	Mihai Walter	EBRAINS 2.0	EBRAINS 2.0: A Research Infrastructure to Advance Neuroscience and Brain Health
1 Excellent Science		MSCA DN	HUM	Institut für Sportwissenschaft	Hossner	Ernst-Joachim	TReND	Translational Research Network in Motor Disorder Rehabilitation: Advancing understanding of variability in motor control and rehabilitation
1 Excellent Science		MSCA DN	MED	Department for BioMedical Research	Rubin	Mark	Mac4Me	Macrophage Targets for Metastatic Treatment
1 Excellent Science		MSCA DN	MED	Institut für Anatomie	Mercader Huber	Nadia	Regenerate-IT	Learning from animals how to regenerate: multidisciplinary training programme in regenerative biology
1 Excellent Science		MSCA DN	MED	Institut für Gewebemedizin und Pathologie	Zlobec Rodriguez Martinez	Inti Maria	MIRACLE	Multilevel inflammatory regulation in cardiometabolic disease
1 Excellent Science		MSCA DN	MED	Universitätsklinik für Nuklearmedizin	Romiger Gourni	Axel Eleni	OncoProTools	Protease-guided tumor targeting tools to revolutionize cancer diagnosis and treatment
1 Excellent Science		MSCA DN	MED	Universitätsklinik für Viszerale Chirurgie und Medizin	Beldi Keller Sauter	Guido Sandra Thomas	Tools4Teams	Research Training to Design and Implement Tools Supporting Safe Teamwork in Healthcare
1 Excellent Science		MSCA DN	NAT	Departement für Chemie, Biochemie und Pharmazie	Paradisi	Francesca	MetRaZymes	Metal-containing Radical Enzymes
1 Excellent Science		MSCA DN	NAT	Institut für Geologie	Churakov	Sergey	CONTRABASS	Zero-CO2 cement through carbonation of calcium silicates and aluminates
1 Excellent Science		MSCA DN	NAT	Institut für Geologie	Rubatto Herwegh	Daniela Marco	TALENTS	The doctoral rift science network for the energy transition
1 Excellent Science		MSCA DN	NAT	Institut für Informatik	Panichella	Sebastiano	InnoGuard	Hybrid and Generative Intelligence for Trustworthy Autonomous Cyber-Physical Systems
1 Excellent Science		MSCA GF	HIST	Historisches Institut, Alte Geschichte und Rezeptionsgeschichte der Antike	Rebenich Tentori Montalto	Stefan Marco	SCENIC	Supplementum CrEticum: New Inscriptions from Crete.
1 Excellent Science		MSCA GF	NAT	Institut für Geologie	Mavromatis Athanasiadou	Vasileios Dimitra	MiKidSton	Deciphering mineralogical and compositional properties of kidney stones: Implications for formation mechanism and potential treatments

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1 Excellent Science		MSCA GF	NAT	Institut für Ökologie und Evolution	Peichel <i>Bohutinska</i>	Chatherine <i>Magdalena</i>	CONstrainCONverge	Constrained convergence: does pleiotropy constrain convergent alpine adaptation?
1 Excellent Science		MSCA GF	THEOL	Institut für Judaistik	Bloch <i>Dell'Acqua</i>	René <i>Antonio</i>	WaterDecor	Water for the People, Décor for the City: Nymphaea and Public Fountains in Iudaea/Syria-Palaestina and Provincia Arabia from the Roman until the Byzantine Periods (ca. 1st BCE-7th CE)
1 Excellent Science		MSCA GF	WISO	Departement Volkswirtschaftslehre	Letina <i>Schneider</i>	Igor <i>Johannes</i>	KnowEvolAndIdeasMkt	The Evolution of Knowledge in the Market of Ideas
1 Excellent Science		MSCA Staff Exchange	MED	Institut für Pathologie	Krebs	Philippe	CHIRON	The role of the non-canonical death receptor signalling in cancer and immune cells
1 Excellent Science		MSCA Staff Exchange	NAT	Physikalisches Institut	Weber	Michele	SENSE	Search for new physics and technological advancements from neutrino experiments at the high intensity frontier. A cooperative Europe - United States - Russia effort.
1 Excellent Science	x	SERI-funded ERC Consolidator Grant*	NAT	Astronomisches Institut	Kleint	Lucia	ENERGETICS	Explaining the energetics of solar flares
1 Excellent Science	x	SERI-funded ERC Consolidator Grant*	NAT	Center for Space and Habitability	Demory	Brice-Olivier	SenseLife	Remote sensing of living organisms with full Stokes spectro-polarimetry
1 Excellent Science	x	SERI-funded ERC Consolidator Grant*	NAT	Institut für Pflanzenwissenschaften	Erb	Matthias	CANWAS	Canopy Waves - Herbivore-Induced Volatile Dynamics Across Multiple Plants
1 Excellent Science	x	SERI-funded ERC Consolidator Grant*	NAT	Physikalisches Institut	Kühn	Jonas Guillaume	RACE-GO	Rapid Active Coronagraphy of Exoplanets from a Ground Observatory
1 Excellent Science	x	SERI-funded ERC Starting Grant*	NAT	Historisches Institut	Huhtamaa	Heli	VolCOPE	Climate impact and human consequences of past volcanic eruptions
1 Excellent Science	X	SERI-funded ERC Starting Grant*	NAT	Institut für Geologie	Harrison	Anna	DryCO2	Mechanisms of gas-driven mineral weathering in a changing climate
1 Excellent Science	x	SERI-funded ERC Starting Grant*	NAT	Institut für Ökologie und Evolution	Fabre	Anne-Claire	META-MORPHOSIS	Identifying how life cycle variation drives biodiversity in changing environments over time and space
1 Excellent Science	x	SERI-funded ERC Starting Grant*	NAT	Institut für Ökologie und Evolution	Thakur	Madhav	FoBEx	Food webs and biodiversity change in an extreme world
1 Excellent Science	x	SERI-funded ERC Starting Grant*	NAT	Institut für Pflanzenwissenschaften	Delgado Manzanedo	Rubén	OpenRing	Forest biodiversity-stability relationships across spatiotemporal scales
1 Excellent Science	x	SERI-funded ERC Starting Grant*	NAT	Institut für Philosophie	Matheson	Benjamin	CoGS	Collective Guilt and Shame
1 Excellent Science	x	SERI-funded ERC Starting Grant*	NAT	Physikalisches Institut	Laufkötter	Charlotte	MOANA	Mechanistic model simulations of the marine biological carbon pump
2 Global Challenges		Cluster 1 Health / RIA	HUM	Institut für Psychologie	Berger	Thomas	ReConnected	A complex systems approach to promote resilience and connect vulnerable European citizens in the community in times of change
2 Global Challenges		Cluster 1 Health / RIA	HUM	Institut für Sportwissenschaft	Nigg	Claudio	GO GREEN NEXT	Promoting Future Health in Ciites
2 Global Challenges		Cluster 1 Health / RIA	MED	ARTORG Center for Biomedical Engineering Research	Mougiakakou	Stavroula	Better4U	Preventing obesity through biologically and behaviorally tailored interventions for you
2 Global Challenges		Cluster 1 Health / RIA	MED	ARTORG Center for Biomedical Engineering Research	Mougiakakou	Stravroula	MELISSA	Mobile Artificial Intelligence Solution for Diabetes Adaptive Care
2 Global Challenges		Cluster 1 Health / RIA	MED	Berner Institut für Hausarztmedizin	Baggio	Stéphanie	SP-EU	Social prescribing to promote and improve access to health and care services for people in vulnerable situations in Europe

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2 Global Challenges		Cluster 1 Health / RIA	MED	Berner Institut für Hausarztmedizin	Rodondi	Nicolas	BE-SAFE	Implementing a patient-centred and evidence-based intervention to reduce benzodiazepine and sedative-hypnotic use to improve patient safety and quality of care
2 Global Challenges		Cluster 1 Health / RIA	MED	Institut für Sozial- und Präventivmedizin	Low	Nicola	ESCAPE	Efficient and rapidly scalable EU-wide evidence-driven pandemic response plans through dynamic epidemic data synthesis
2 Global Challenges		Cluster 1 Health / RIA	MED	Universitätsklinik für Intensivmedizin	Faltys	Martin	IntelliLung	Intelligent Lung Support for Mechanically Ventilated Patients in the Intensive Care Unit
2 Global Challenges		Cluster 2 Culture, Creativity, Inclusive Society / RIA	RW	World Trade Institute	Fornalé	Elisa	HRJust	States' Practice of Human Rights Justification: a study in civil society engagement and human rights through the lens of gender and intersectionality
2 Global Challenges		Cluster 2 Culture, Creativity, Inclusive Society / RIA	WISO	Institut für Politikwissenschaft	Bias Amacker	Leandra Michèle	UNTWIST	Policy recommendations to regain feminist losers as mainstream voters
2 Global Challenges		Cluster 4 Digital, Industry, Space / IA	MED	ARTORG Center for Biomedical Engineering Research	Sznitman	Raphael	GEYEDANCE	AI guidance for robot-assisted eye surgery
2 Global Challenges		Cluster 5 Climate, Energy Mobility / RIA	NAT	Physikalisches Institut	Frölicher	Thomas	TipESM	Exploring Tipping Points and Their Impacts Using Earth System Models
2 Global Challenges		Cluster 5 Climate, Energy Mobility / RIA	NAT	Physikalisches Institut	Stocker	Thomas	ClimTip	Climate Tipping Points: Uncertainty-aware quantification of Earth system tipping potential from observations and models and assessment of associated climatic, ecological, and socioeconomic impacts
2 Global Challenges		Cluster 6 Food, Bioeconomy, Agriculture, Environment / RIA	NAT	Institut für Pflanzenwissenschaften	Tadele	Zerihun	BOOSTER	Boosting drought tolerance in key cereals in the era of climate change
3 Innovative Europe		EIC Pathfinder	MED	Institut für Pharmakologie	von Gunten	Stephan	NUTRIMMUNE	Precision Nutrition to optimize immune response for metabolic health
3 Innovative Europe		EIC Pathfinder	NAT	Departement für Chemie, Biochemie und Pharmazie	Banerji Réhault	Natalie Julien	ICONIC	In-situ & operando organic electrochemical transistors monitored by non-destructive spectroscopies for organic CMOS-like neuromorphic circuits
3 Innovative Europe		EIC Pathfinder	NAT	Institut für Angewandte Physik	Stefanov	André	ARTEMIS	Molecular materials for on-chip integrated quantum light sources
WIDERA		Reforming and Enhancing the European R&I System / RIA	VET	Veterinary Public Health Institute	Würbel	Hanno	iRISE	Improving Reproducibility In Science
European Partnerships		Global Health EDCTP3 JU / RIA	MED	Institut für Sozial- und Präventivmedizin	Low	Nicola	MBOTE-SK	Mpox Biology, Outcome, Transmission and Epidemiology Study in South Kivu
European Partnerships		Global Health EDCTP3 JU / RIA	MED	Universitäres Notfallzentrum	Keitel	Kristina	IMCI-PLUS	Point of Care Ultrasound for Lower Respiratory Tract Infections in sub-Saharan African Children
European Partnerships		Smart Networks and Services JU	NAT	Institut für Informatik	Braun	Torsten	6G-CLOUD	Service-oriented 6G network architecture for distributed, intelligent, and sustainable cloud-native communication systems
Euratom		Cofund	NAT	Institut für Geologie	Wersin Kiczka	Paul Mirjam	EURAD-2	European Partnership on Radioactive Waste Management - 2

\*Successful projects submitted to the ERC and now receiving Swiss funding from SERI.

## Horizon 2020

### Abbreviations - Programme

ERC: European Research Council

FET: Future and Emerging Technologies

AAL: Active and Assisted Living Programme

IMI2: Innovative Medicines Initiative 2

LEIT: Leadership in Enabling and Industrial Technologies

MSCA: Marie Skłodowska-Curie Actions

- EF: European Fellowship

- ETN: European Training Network

- GF: Global Fellowship

- RISE: Research & Innovation Staff Exchange

### Abbreviations - Project Type

CSA: Coordination & Support Action

IA: Innovation Action

RIA: Research & Innovation Action

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1 Excellent Science	x	ERC Advanced Grant	NAT	Departement für Chemie und Biochemie	Reymond	Jean-Louis	SPACE4AMPS	Chemical Space for Antimicrobials on a Peptide Basis
1 Excellent Science	x	ERC Advanced Grant	VET	Institut für Tierpathologie	Rottenberg	Sven	TETHER	Targeting the essentialome of radiotherapy-resistant cancer
1 Excellent Science	x	ERC Consolidator Grant	MED	Institut für Anatomie	Mercader Huber	Nadia	TransReg	Transgenerational epigenetic inheritance of cardiac regenerative capacity in the zebrafish
1 Excellent Science	x	ERC Consolidator Grant	NAT	Astronomisches Institut	Jäggi	Adrian	SPACE TIE	Unifying the three pillars of Geodesy using space ties
1 Excellent Science	x	ERC Consolidator Grant	NAT	Geographisches Institut	Ifejika Speranza	Chinwe	SUSTAINFORESTS	Tropical forest patches under pressure: Dynamics, functions and sustainable management in agricultural landscapes of the West African forest and savannah zones
1 Excellent Science	x	ERC Consolidator Grant	NAT	Physikalisches Institut	Ariga	Akitaka	FASERnu	Studying Neutrinos at the High Energy Frontier
1 Excellent Science	x	ERC Starting Grant	MED	Universitätsklinik für Viszerale Chirurgie und Medizin	Al Nabhani	Ziad	WePredict	Microbiota and immune responses at weaning predict the susceptibility to chronic inflammatory diseases in adulthood
1 Excellent Science	x	ERC Starting Grant	NAT	Centre for Development and Environment	Oberlack	Christoph	COMPASS	Is environmental justice necessary for human well-being? Comparative analysis of certification schemes, inclusive business, and solidarity economy strategies
1 Excellent Science	x	ERC Starting Grant	NAT	Institut für Geologie	Lanari	Pierre	PROMOTING	Prograde metamorphism Modeling: a new petrochronological and computing framework
1 Excellent Science	x	ERC Starting Grant	NAT	Institut für Informatik	Bommes	David	AlgoHex	Algorithmic Hexahedral Mesh Generation
1 Excellent Science	x	ERC Starting Grant	NAT	Institut für Pflanzenwissenschaften	Robert	Christelle	PRENEMA	Direct plant responses to the third trophic level as a determinant of multitrophic interactions
1 Excellent Science	x	ERC Synergy Grant	HIST	Institut für Archäologische Wissenschaften	Hafner Tinner	Albert Willy	EXPLO	Exploring the dynamics and causes of prehistoric land use change in the southern Balkans

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1 Excellent Science		FET / RIA	MED	Universitäres Notfallzentrum	Hautz	Wolf	DIGIPREDICT	Edge AI-deployed DIGItal Twins for PREDICTing disease progression and need for early intervention in infectious and cardiovascular diseases beyond COVID-19
1 Excellent Science		FET / RIA	NAT	Departement für Chemie, Biochemie und Pharmazie	Banerji	Natalie	MITICS	Mixed Ionic and electronic Transport In Conjugated polymers for bioelectronics
1 Excellent Science	x	MSCA ETN	HUM	Institut für Psychologie	Sczesny	Sabine	G-VERSITY	Achieving Gender Diversity
1 Excellent Science		MSCA ETN	MED	ARTORG Center for Biomedical Engineering Research	Kling Sznitman	Sabine Raphael	OBERON	Opto-Biomechanical Eye Research Network
1 Excellent Science		MSCA ETN	MED	Universitätsklinik für Neurologie	Chan	Andrew	Bio2Brain	Nose-to-Brain Delivery of Biopharmaceuticals for the therapy of central nervous system diseases: A design-based approach for efficient drug delivery systems
1 Excellent Science		MSCA ETN	MED	Universitätsklinik für Orthopädische Chirurgie und Traumatologie	Gantenbein	Benjamin	Disc4All	Training network to advance on integrated computational simulations in translational medicine, applied to intervertebral disc degeneration
1 Excellent Science		MSCA ETN	NAT	Institut für Geologie	Schlunegger	Fritz	S2S-Future	Signal propagation in source to sink for the future of earth resources and energies
1 Excellent Science		MSCA ETN	NAT	Physikalisches Institut	Hubertus	Fischer	DEEPICE	Research and training network on understanding Deep ice core Proxies to Infer past antarctic climate dynamics
1 Excellent Science	x	MSCA GF	NAT	Wyss Academy for Nature	Messerli Kellner	Peter Elke	GOVTROFF	Sustainable resource governance under pressure: How to govern trade-off situations under global change?
1 Excellent Science		MSCA RISE	NAT	Centre for Development and Environment	Wymann von Dach	Susanne	HIGHLANDS.3	Collective Approach of Research and Innovation for Sustainable Development in Highland
1 Excellent Science		MSCA RISE	NAT	Mathematisches Institut	Metcalfe	George	MOSAIC	Modalities in Substructural Logics: Theory, Methods and Applications
1 Excellent Science		MSCA RISE	NAT	Physikalisches Institut	Weber	Michele	PROBES	Probes of new physics and technological advancements from particle physics experiments. A cooperative Europe - United States - Japan effort.
1 Excellent Science		Research Infrastructures / CSA	NAT	Physikalisches Institut	Weber	Michele	AIDAInnova	Advancement and Innovation for Detectors at Accelerators
3 Societal Challenges		Climate / CSA	NAT	Geographisches Institut	Romppainen-Martius	Olivia	NextGEMS	Next Generation Earth Modelling Systems
3 Societal Challenges		Climate / CSA	NAT	Physikalisches Institut	Fischer	Hubertus	Beyond EPICA	Beyond EPICA Oldest Ice Core: 1,5 Myr of greenhouse gas - climate feedbacks
3 Societal Challenges		Climate / CSA	NAT	Physikalisches Institut	Frölicher	Thomas	PROVIDE	Paris Agreement Overshooting - Reversibility, Climate Impacts and Adaptation Needs
3 Societal Challenges		Food / RIA	NAT	Centre for Development and Environment	Alaoui	Abdallah	SPRINT	Sustainable Plant Protection Transition: A Global Health Approach
3 Societal Challenges		Food / RIA	NAT	Centre for Development and Environment	Bigalke Alaoui	Moritz Abdallah	MINAGRIS	Micro- and nano-plastics in agricultural soils: sources, environmental fate and impacts on ecosystem services and overall sustainability
3 Societal Challenges		Food / RIA	NAT	Centre for Development and Environment	Lemann	Tatenda	OPTAIN	Optimized small retention strategies for agricultural regions in Europe

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3 Societal Challenges		Food / RIA	NAT	Centre for Development and Environment	Zabel	Astrid	SHOWCASE	Showcasing synergies between agriculture, biodiversity and Ecosystem services to help farmers capitalising on native biodiversity
3 Societal Challenges		Food / RIA	NAT	Physikalisches Institut	Fröhlicher	Thomas	ATLANTECO	Atlantic Ecosystems Assessment, Forecasting & Sustainability
3 Societal Challenges		Food / RIA	RW	Kompetenzzentrum für Public Management	Blankart	Rudolf	AVANT	Alternatives to Veterinary Antimicrobials
3 Societal Challenges		Food / RIA	RW	World Trade Institute	Häberli	Christian	MATS	Making Agricultural Trade Sustainable
3 Societal Challenges		Food / RIA	VET	Institut für Veterinärbakteriologie	Jores	Jörg	PREPARE4VBD	A Cross-disciplinary Alliance to Identify, Predict and Prepare for Emerging Vector-borne Diseases
3 Societal Challenges		Food / RIA	VET	VPH-Institut der Universität Bern	Toscano	Michael	GEroNIMO	Genome and Epigenome Enabled Breeding in Monogastrics
3 Societal Challenges		Health / RIA	MED	Institut für Anatomie	Mercader Huber	Nadia	REANIMA	New-generation cardiac therapeutic strategies directed to the activation of endogenous regenerative mechanisms
3 Societal Challenges		Health / RIA	MED	Universitätsklinik für Kinderheilkunde	Agyemann	Phillip	DIAMONDS	Diagnosis and Management of Febrile Illness using RNA Personalised Multiclass Signature Diagnosis
3 Societal Challenges		Health / RIA	RW	Kompetenzzentrum für Public Management	Blankart	Rudolf	SCREEN4CARE	SCREEN4CARE Ecosystem for rare NMDs
Cross-cutting activities		Green Deal	NAT	Geographisches Institut	Adler	Carolina	IMPETUS	Dynamic information management approach for the implementation of climate resilient adaptation packages in European regions
IMI2		RIA	MED	Universitätsklinik für Viszerale Chirurgie und Medizin	Stirmimann	Guido	TransBioLine	Translational Safety Biomarker Pipeline: Enabling development and implementation of novel safety biomarkers in clinical trials and diagnosis of disease
Euratom		RIA	MED	Institut für Sozial- und Präventivmedizin	Spycher	Ben	RADONORM	Towards effective radiation protection based on improved scientific evidence and social considerations - focus on radon and NORM