

## **ERC Starting Grants 2023**

### **List of Principal Investigators selected for funding**

*The statistics and final list of successful candidates are provisional. The Trade and Cooperation Agreement between the European Union and the United Kingdom allows for associating the UK to the current EU research and innovation funding programme, Horizon Europe, subject to the adoption of a Protocol. As this Protocol has not been adopted so far, the UK is still considered "non-associated" to Horizon Europe. Therefore, the successful proposals of applicants based in a country in the process of associating to Horizon Europe will be eligible for funding only if the relevant Horizon Europe association agreement applies by the time of the signature of the grant agreement. However, successful applicants from UK host institutions can still be funded, provided that they move to a host institution in an eligible country.*

Last name	First name	Host Institution Local name	Host Institution name	Host country	Acronym	Title	Panel
CAMPBELL	Clarissa	Forschungszentrum für Molekulare Medizin (CeMM)	Research Center for Molecular Medicine (CeMM)	AT	T Cell Feedback	T cell regulation by fed state bacterial metabolites	LS4
DELGADO MANZANEDO	Ruben	Universität Innsbruck	University of Innsbruck	AT	OpenRing	Forest biodiversity-stability relationships across spatiotemporal scales	LS8
DELLINGER	Agnes	Universität Wien	University of Vienna	AT	MountBuzz	MountBuzz: relating context-dependent bee-flower interactions to macroevolution	LS8
GAIDT	Moritz	Forschungsinstitut für Molekulare Pathologie Ges.m.b.H	The Research Institute of Molecular Pathology	AT	GUARDIANS	Guard-driven immunity against pathogens	LS6
MAIER	Barbara	Forschungszentrum für Molekulare Medizin (CeMM)	Research Center for Molecular Medicine (CeMM)	AT	REWIRE	Rewire the lymph node niche to instruct T cell immunity	LS4
PINHEIRO	Diana	Forschungsinstitut für Molekulare Pathologie Ges.m.b.H	The Research Institute of Molecular Pathology	AT	DYNAMORPH	Coupling morphogen dynamics with mechanics in the control of form and pattern	LS3
QUERQUES	Irma	Universität Wien	University of Vienna	AT	BROADCAST	Molecular mechanisms, functions and applications of RNA-guided DNA transposons	LS1
VAN DER VEEKEN	Joris	Forschungsinstitut für Molekulare Pathologie Ges.m.b.H	The Research Institute of Molecular Pathology	AT	DeconstrucTolerance	Deconstructing Intestinal Immune Tolerance	LS6
JESCHKE	Jana	Université Libre de Bruxelles	Free University of Brussels (ULB)	BE	EpiResist	Exposing hidden targets of drug resistance in cancer by mapping the epitranscriptome at single-cell resolution	LS9
VOROBIEVA	Anastassia	Vlaams Instituut voor Biotechnologie	Flanders Institute for Biotechnology (VIB)	BE	PoreMADNeSS	Massive parallel de novo design of sensing nanopores	LS1
FABIAN	Peter	Masarykova univerzita	Masaryk University	CZ	MERLIN	Metabolic regulation of the skeletal stem cell niche	LS3

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TĚŠINA	Petr	Masarykova univerzita	Masaryk University	CZ	NeuroQuality	Mechanisms of human co-translational quality control and its role in neural tissue.	LS1
ARADILLA ZAPATA	Laura	Universität des Saarlandes	Saarland University	DE	CROSSTALK	Opposites attract: Crosstalk between vimentin and microtubules - mechanical stability vs. dynamic adaptability	LS3
BULUT-KARSLIOGLU	Aydan	Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.	Max Planck Society	DE	DOR CODE	Propagation of cellular memory through dormancy	LS3
COSCIA	Fabian	Max-Delbrück-Centrum für Molekulare Medizin in der Helmholtz-Gemeinschaft	Max Delbrück Center for Molecular Medicine in the Helmholtz Association	DE	Spatial Proteomics	Deep Spatial Proteomics: connecting cellular neighbourhoods to functional states	LS2
DE OLIVEIRA MANN	Carina	Technische Universität München	Technical University of Munich	DE	NTasePro	NTase Products and Cyclic Nucleotide Signalling	LS1
FRANKE	Katrin	Eberhard Karls Universität Tübingen	University of Tübingen	DE	Eye to Action	Tracing Visual Computations from the Retina to Behavior	LS5
GROSCHNER	Lukas	Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.	Max Planck Society	DE	TEMPRODROME	Temporal processing in Drosophila melanogaster	LS5
HADJIECONOMOU	Dafni	Ruprecht-Karls-Universität Heidelberg	University of Heidelberg	DE	GutSense	Environmental control of physiology through the brain-gut axis	LS3
HARTMANN	Felix	Deutsches Krebsforschungszentrum	German Cancer Research Centre	DE	SpatialTMEMetabolism	Spatial Quantification of Cellular Metabolism in the Tumor Immune Microenvironment	LS4
HILLEN	Hauke	Universitätsmedizin Göttingen Georg-August-Universität	University Medical Center Göttingen	DE	MitoRNA	Structural studies of the human mitochondrial RNA life cycle	LS1

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HÖFER	Katharina	Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.	Max Planck Society	DE	NAD-ART	Conjugation of NAD-capped RNAs to proteins by ADP-ribosyltransferases to generate RNA therapeutics	LS9
JESCHEK	Markus	Universität Regensburg	University of Regensburg	DE	BiosenSAI	Biosensing by Sequence-based Activity Inference	LS9
KAMAL	Nadia	Helmholtz Zentrum München - Deutsches Forschungszentrum für Gesundheit und Umwelt	Helmholtz Munich - German Research Centre for Environmental Health	DE	RESIST	Resilient Oats: Improving Drought Stress Resistance in a Changing Climate	LS9
KATHER	Jakob Nikolas	Technische Universität Dresden	Technical University of Dresden	DE	NADIR	New directions for deep learning in cancer research through concept explainability and virtual experimentation.	LS7
KNIELING	Ferdinand	Universitätsklinikum Erlangen	University Hospital Erlangen	DE	IseeG	Functional optoacousticS for imaging Early onsEt of Gut inflammation	LS7
LOWET	Eric	Universitätsmedizin Göttingen Georg-August-Universität	University Medical Center Göttingen	DE	OptoDBS	Dissecting the biophysical mechanisms of deep brain stimulation using voltage fluorescence microscopy	LS5
MAGER	Lukas	Eberhard Karls Universität Tübingen	University of Tübingen	DE	SOAR	Systematic Triangulation of Pathobiont-Host-Interactions	LS7
MARQUES	André	Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.	Max Planck Society	DE	HoloRECOMB	How to evolve without centromeres: meiotic recombination dynamics in holocentric plants	LS2
MURPHY	Bonnie	Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.	Max Planck Society	DE	REEL-EM	Development of Reconstructed Electron Energy Loss techniques for Elemental Mapping in macromolecular structures	LS1
OTT	Torben	Humboldt-Universität zu Berlin	Humboldt University of Berlin	DE	TIMEVALUE	Neural and serotonergic mechanisms underlying time valuation in rats	LS5

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OUDELAAR	Aukje Marieke	Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.	Max Planck Society	DE	3D-REG	Shedding light on three-dimensional gene regulation	LS2
PIETZNER	Maik	Charité - Universitätsmedizin Berlin	Charité - University Hospital	DE	GenDrug	Genetically anchored drug target discovery for neglected diseases	LS7
PRAETORIUS	Florian	Technische Universität München	Technical University of Munich	DE	DNA-TO PAss	Design of Nucleic Acid-Templated Ordered Protein Assemblies	LS1
RATZ	Michael	Technische Universität München	Technical University of Munich	DE	SpaRC	Revealing the wiring rules of neural circuit assembly with spatiotemporally resolved molecular connectomics	LS5
SCHLESIGER	Magdalene	Universitätsklinikum Heidelberg	University Hospital Heidelberg	DE	DrugsAndMemory	How do drug-associated contexts drive behaviour? The role of entorhinal circuitry in addiction	LS5
SCHUERCH	Christian	Eberhard Karls Universität Tübingen	University of Tübingen	DE	CAR-TIME	Drivers and Brakes of CAR T Cell Efficacy Determined by the Tumor Immune Microenvironment	LS7
STÖCKL	Anna	Universität Konstanz	University of Constance	DE	DynamicVision	Closing the loop in dynamic vision – from single photons to behaviour in extreme light environments	LS5
TOTH-PETROCZY	Agnes	Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.	Max Planck Society	DE	CONDEVO	Evolution of Biomolecular Condensates	LS1
VAN GESTEL	Jordi	European Molecular Biology Laboratory	European Molecular Biology Laboratory	DE	CO-PP	Uncovering the coevolution between microbial predators and prey	LS8
VILLASEÑOR	Rodrigo	Ludwig-Maximilians-Universität München	University of Munich (LMU)	DE	EpiCblood	Towards early cancer detection and tumor classification using epigenomic biomarkers in blood	LS7

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VON APPEN	Alexander	Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.	Max Planck Society	DE	Organelloids	Mechanisms of nuclear self-assembly	LS1
ZHOU	Qihui	Deutsches Zentrum für Neurodegenerative Erkrankungen e.V	German Centre for Neurodegenerative Diseases - Helmholtz Centre	DE	C9-T Immunity	Do T cells link loss and gain-of-function mechanism in C9orf72 ALS/FTD?	LS5
ZIMMERMANN	Jakob	Julius-Maximilians-Universität Würzburg	University of Würzburg	DE	GuT Memory	Engineered symbionts elucidate gut T cell memory and its (dys)regulation	LS6
ZIMMERMANN-KOGADEEVA	Maria	European Molecular Biology Laboratory	European Molecular Biology Laboratory	DE	MetaboGutModel	Resolving metabolic interactions between the gut microbiota and the host with multi-omics-based modelling	LS2
ZUCKERMANN	Marc	Deutsches Krebsforschungszentrum	German Cancer Research Centre	DE	4D-therapy	Multimodal “4D”-therapy of pediatric high grade glioma	LS7
TAMMAN	Hedvig	Tartu Ülikool	University of Tartu	EE	PhaBacArms	Deciphering stringent response proteins and toxin-antitoxin systems in the arms race between bacteria and phages	LS6
ALTEA MANZANO	Patricia	Universidad de Sevilla	University of Seville	ES	PalmERASERs	The role of Palmitoylation ERASERs in cancer metastasis	LS4
CASANOVA ACEBES	Maria	Fundación Centro Nacional de Investigaciones Oncológicas Carlos III	Spanish National Cancer Research Centre (CNIO)	ES	INN-TIME	Co-option of host circadian rhythms in cancer	LS4
COSTA	Francesco	Fundación Pública Andaluza para la Investigación de Málaga en Biomedicina y Salud	Andalusian Public Foundation for Health and Biomedicine Research	ES	ORACLE	Optimize risk prediction after myocardial infarction through artificial intelligence and multidimensional evaluation	LS7
LLORENS-RICO	Veronica	Centro de Investigación Príncipe Felipe	Príncipe Felipe Research Center	ES	REGUBIOME	Transcriptional REGUlation as a mediator of bacterial interactions in the microBIOME	LS2

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LOPEZ GARCIA-BASTEIRO	Alberto	Fundacion Privada Instituto de Salud Global Barcelona	Barcelona Institute for Global Health	ES	TB-QUEST	Questioning the Epidemiology of Subclinical Tuberculosis	LS7
REYNA-LLORENS	Ivan	Centre de Recerca en Agrigenomica	Centre for research in Agricultural Genomics	ES	METACAM	Metabolic flexibility in drought: Leveraging Portulaca for defining design principles for a combined C4-CAM pathway	LS9
ROVIRA CLAVE	Xavier	Institut de Bioenginyeria de Catalunya	Institute for Bioengineering of Catalonia	ES	SpaceClones	Integrative profiling and engineering of clonal cancer cell behaviours: from the tissue level down to the molecular scale	LS2
SANTOS MORENO	Javier	Universitat Pompeu Fabra	Pompeu Fabra University	ES	TICK-TOCK Do and Die	Engineering biological timers and their applications	LS9
WCULEK	Stefanie	Fundacio Privada Institut de Recerca Biomedica IRB	Institute for Research in Biomedicine	ES	MyTissue	Studying the metabolism and function of myeloid dendritic cells and neutrophils in distinct tissues in health and aging	LS6
JUNTTILA	Samuli	Itä-Suomen yliopisto	University of Eastern Finland	FI	DRYTREE	Environmental thresholds for drought- and heat-related tree mortality	LS8
LAANTO	Elina	Jyväskylän Yliopisto	University of Jyväskylä	FI	GIAPHAGE	Life of Giant Phages	LS8
LENGEFELD	Jette	Helsingin yliopisto	University of Helsinki	FI	StemCellSize	Cell size as driver of stem cell aging and cancer	LS3
BENAJIBA	Lina	Institut national de la santé et de la recherche médicale	National Institute of Health and Medical Research (INSERM)	FR	OncoNichPath	Unmasking the dynamic influence of the hematopoietic niche as an oncogenic path to myeloid neoplasms evolution	LS4
BIZZOTTO	Sara	Institut du cerveau et de la moelle épinière	Institute for Brain and Spinal Cord	FR	LINMOS	Lineage tracing of the human brain	LS5
BONAZZI	Daria	Institut national de la santé et de la recherche médicale	National Institute of Health and Medical Research (INSERM)	FR	HOMEPTH	Control of Host Mechanics by a Bacterial Pathogen and Functional Impact	LS3
BULIN	Anne-Laure	Institut national de la santé et de la recherche médicale	National Institute of Health and Medical Research (INSERM)	FR	RADIANCE	Nanoscintillators to potentiate brain cancer radiotherapy: from physics to preclinical trials	LS7

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BURIOLI	Erika	Université de Montpellier	University of Montpellier	FR	HYPERCAN	Mechanisms and evolutionary significance of hyperploidy variations in a long-lived parasitic cancer	LS8
DELLOYE-BOURGEOIS	Céline	Centre National de la Recherche Scientifique (CNRS)	National Center for Scientific Research (CNRS)	FR	CANEUTREAT	Decrypting neuro-cancer crosstalk in pediatric cancers of the peripheral nervous system	LS4
GIRARD	Chloe	Centre National de la Recherche Scientifique (CNRS)	National Center for Scientific Research (CNRS)	FR	DYNACO	DYNAMics of CrossOver designation	LS2
GOMES	Ana	Centre National de la Recherche Scientifique (CNRS)	National Center for Scientific Research (CNRS)	FR	Janus	Cell cycle progression in malaria parasites	LS6
GUINAT	Claire	Institut national de recherche pour l'agriculture, l'alimentation et l'environnement	INRAE	FR	TrackFLU	Tracking the spread of avian influenza viruses in live bird market networks	LS9
LEFEVRE	Arthur	Centre National de la Recherche Scientifique (CNRS)	National Center for Scientific Research (CNRS)	FR	MarmOTChat	Oxytocin regulates marmosets' affiliation and vocal communication	LS5
LIBIS	Vincent	Institut national de la santé et de la recherche médicale	National Institute of Health and Medical Research (INSERM)	FR	MeDiSyn	Scalable Microbial Metabolite Discovery Through Synthetic Biology	LS9
MÉROT	Claire	Centre National de la Recherche Scientifique (CNRS)	National Center for Scientific Research (CNRS)	FR	EVOL-SV	The role of structural genomic variants in eco-evolutionary processes	LS8
PASSARO	Diana	Institut national de la santé et de la recherche médicale	National Institute of Health and Medical Research (INSERM)	FR	PLASTECITY	PLASTicity of Endothelial Cell as new Target for acute myeloid leukemia Therapy	LS4
SERRA	Heidi	Centre National de la Recherche Scientifique (CNRS)	National Center for Scientific Research (CNRS)	FR	MeioPoly	Meiotic adaptation to allopolyploidy	LS2
BROWNE	Hilary	University College Cork, National University of Ireland	University College Cork, National University of Ireland	IE	SYNergize	SYNergize: Understanding spore-forming gut bacteria biology to target pathogens	LS2

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GAHAN	James	University of Galway	University of Galway	IE	OriCellDiff	Deciphering the origins of cell differentiation and developmental gene regulation in animals	LS8
ALON	Shahar	Bar-Ilan University	Bar-Ilan University	IL	TouchCancer	Using super-resolved in situ sequencing to reveal the cellular encoding of immune-tumour contact events	LS7
BAR-YAACOV	Dan	Ben-Gurion University of the Negev	Ben-Gurion University of the Negev	IL	REDBAC	Occurrence, Regulation, and Function of Bacterial mRNA Editing Under Diverse Environments	LS8
BASU	Raunak	The Hebrew University of Jerusalem	The Hebrew University of Jerusalem	IL	ChoiceSpace	Task-relevant cognitive maps and their role in spatial decision-making	LS5
BREKER	Michal	The Hebrew University of Jerusalem	The Hebrew University of Jerusalem	IL	Chloro-Import	Systematic mapping of the chloroplast protein import system	LS3
DAR	Daniel	Weizmann Institute of Science	Weizmann Institute of Science	IL	SocialBugs	Visualizing microbial societies: exposing the principles of single-cell phenotypic heterogeneity via massively multiplexed imaging	LS2
ENGELHARD	Ben	Technion - Israel Institute of Technology	Technion - Israel Institute of Technology	IL	DopamineLearnLoops	Toward a new understanding of learning in the brain: dynamic parallel circuit loops for complex learning	LS5
OREN	Yaara	Tel Aviv University	Tel Aviv University	IL	CancerPersisters	Understanding and targeting cancer persister cells	LS4
PERLMAN	Or	Tel Aviv University	Tel Aviv University	IL	BabyMagnet	Transformative Pediatric Brain Cancer Imaging using Integrated Biophysics-AI Molecular MRI	LS7
SHEMA	Efrat	Weizmann Institute of Science	Weizmann Institute of Science	IL	EpiCancer	Comprehensive Platform for the Functional Characterization of Cancer Epigenetics and Diagnosis	LS9

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UMSCHWEIF	Gali	The Hebrew University of Jerusalem	The Hebrew University of Jerusalem	IL	ZoomINs	The missing link: inhibitory interneurons as the core of anxiety and depression comorbidity	LS5
ZINGER	Assaf	Technion - Israel Institute of Technology	Technion - Israel Institute of Technology	IL	MILKOSOMES	Breast Milk Biomimetic Nano Particles as a Versatile, Non-Invasive, Oral Drug Delivery Tool	LS7
CATTANEO	Paola	Consiglio Nazionale delle Ricerche	Italian National Research council	IT	Novel.CaRe	Harnessing Novel Micropeptides in Cardiomyocytes to promote Cardiac Regeneration	LS4
DE GIOVANNI	Marco	Università Vita-Salute San Raffaele	Vita-Salute San Raffaele University	IT	GREMLIN	The role of GPCRs and homing molecules in the control and regionalization of mucosal immunity.	LS6
GALLINA	Irene	Università degli Studi di Padova	University of Padua	IT	KAPTION	Mechanisms of Kaposi's sarcoma herpesvirus replication and maintenance during latency	LS1
VERNIERI	Claudio	Fondazione Istituto Firc di Oncologia Molecolare	FIRC Institute for Molecular Oncology (IFOM)	IT	METABALANCANCE R	Setting the optimal balance between metabolite supplementation and deprivation in cancer therapy	LS7
BELDERBOS	Mirjam	Prinses Maxima Centrum voor Kinderoncologie	Princess Maxima Center for Pediatric Oncology	NL	RESTART	How is blood (re-)made? Regeneration of human hematopoietic stem cells after transplantation	LS7
DEVALLA	Harsha	Academisch Medisch Centrum - Universiteit Van Amsterdam	Academic Medical Centre, University of Amsterdam	NL	Beat-to-Beat	Unraveling pacemaker (dys)function using novel stem cell-derived human heart models	LS4
FREAL	Amélie	VU Medisch Centrum	VU Medical Centre Amsterdam	NL	PLaisTICITY	Axon Initial Segment plasticity: unravelling the mechanisms that control neuronal excitability	LS5
LOHBECK	Madelon	Wageningen University	Wageningen University	NL	REACT	Regreening Africa with natural regeneration	LS8

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SCHWAB	Bettina	Universiteit Twente	University of Twente	NL	DECODE	Desynchronizing weak cortical fields during deep brain stimulation	LS7
THIJSSSEN	Rachel	Academisch Medisch Centrum - Universiteit Van Amsterdam	Academic Medical Centre, University of Amsterdam	NL	SC-Plasticity	Applying novel single-cell multiomics to elucidate leukaemia cell plasticity in resistance to targeted therapy	LS7
BOCCARA	Charlotte	Universitetet i Oslo	University of Oslo	NO	SleepCog	Map and manipulate sleep oscillations to reveal their role in healthy cognitive development	LS5
GABANYI	Ilana	Fundação Calouste Gulbenkian	Calouste Gulbenkian Foundation	PT	MicrobiotaNeuroTalk	Trafficking mechanisms and physiological factors mediating a direct gut microbiota-brain neuron interaction	LS4
GHEDINI	Giulia	Fundação Calouste Gulbenkian	Calouste Gulbenkian Foundation	PT	META_FUN	Mapping metabolic responses to understand coexistence and community functioning	LS8
MINUTTI	Carlos	Fundação Champalimaud	Champalimaud Foundation	PT	cDCFun	Conventional Dendritic Cells – Ecology, Diversity, and Function	LS6
KARLSSON	Kasper	Karolinska Institutet	Karolinska Institute	SE	Precision Lethality	Precision Lethality to overcome clonal heterogeneity in high-risk neuroblastoma	LS7
LOPEZ	Juan Pablo	Karolinska Institutet	Karolinska Institute	SE	FASTer	Identifying the Fast-acting Antidepressant Signatures of Treatment Response with psychedelic compounds using a novel behavioral tracking system and single-cell resolution	LS5
MEHRSHAD	Maliheh	Sveriges Lantbruksuniversitet	Swedish University of Agricultural Sciences	SE	MULTIPHAGE	Phage co-infection: a missing link in deciphering phage co-evolutionary dynamics	LS8
OLITO	Colin	Lunds universitet	Lund University	SE	separatingSexes	Many paths to separate sexes: the genomics of sex-determination in the Hawaiian Wikstroemia	LS8

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PUCETAITE	Milda	Lunds universitet	Lund University	SE	INTERSPEC	Tracing single-cell scale chemical signaling between interacting soil fungi	LS8
REMS	Lea	Univerza v Ljubljani	University of Ljubljana	SI	REINCARNATION	Reversible and irreversible cardiac electroporation: Establishing the fundamentals to advance cardiac treatments	LS9
HETHERINGTON	Alexander	University of Edinburgh	University of Edinburgh	UK	WhyFib	Uncovering the evolutionary history and significance of Fibonacci spirals in vascular plants	LS8
PANDEY	Bipin	University of Nottingham	University of Nottingham	UK	GROUNDBREAKING	Discovering how roots sense compacted soils	LS3
QING	Yujia	University of Oxford	University of Oxford	UK	NANOPRO	Enzymeless nanopore proteoform identification	LS9
VAN DORP	Lucy	University College London	University College London	UK	RED-MAP	Recovering Evolutionary Drivers of MAlarial Parasites – leveraging genomics past and present	LS8