

## **ERC Consolidator Grants 2022**

### **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
BOGNER	Wolfgang	Medizinische Universität Wien	Medical University of Vienna	AT	GLUCO-SCAN	Deuterium labeling of GLUCOse improves magnetic resonance imaging Sensitivity to CANcer metabolism	LS7
JOESCH	Maximilian	Institute of Science and Technology Austria	Institute of Science and Technology Austria	AT	JANUS	Action Selection in the Midbrain: Neuromodulation of Visuomotor Senses	LS5
TOMAZOU	Eleni	St. Anna Kinderkrebsforschung GmbH	Childrens Cancer Research Institute	AT	SARCOMAkids	Developmentally programmed pediatric sarcomas: a versatile platform for drug discovery and molecular precision medicine	LS7
IMPENS	Francis	Vlaams Instituut voor Biotechnologie	Flanders Institute for Biotechnology (VIB)	BE	MULTIMOYA	Multi-omics characterization of immune triggers in Moyamoya disease	LS6
MOVAHEDI	Kiavash	Vrije Universiteit Brussel	Free University of Brussels (VUB)	BE	ReplaceMi	Microglia engineering and replacement to treat brain disease	LS5
VAN DE POEL	Bram	Katholieke Universiteit Leuven	University of Leuven	BE	ETHYLUTION	Revealing the ancient plant ethylene biosynthesis and ACC signaling pathway	LS8
HRCEK	Jan	Biologické centrum AV CR, v. v. i.	Biology Centre Czech Academy of Science	CZ	EcoEvoDiv	Eco-evolutionary dynamics and the maintenance of organismal diversity	LS8
BOCKLITZ	Thomas	Leibniz-Institut für Photonische Technologien e.V.	Leibniz Institute of Photonic Technology	DE	STAIN-IT	Non-invasive computational immunohistochemical staining based on deep learning and multimodal imaging	LS7
BUETTNER	Florian	Deutsches Krebsforschungszentrum	German Cancer Research Centre	DE	TAIPO	Trustworthy AI tools for personalized oncology	LS7
FEIGE	Matthias	Technische Universität München	Technical University of Munich	DE	DeCoDe	Deciphering Cellular Networks for Membrane Protein Quality Control Decisions	LS3
FERNANDEZ-BUSNADIEGO	Ruben	Universitätsmedizin Göttingen Georg-August-Universität	University Medical Center Göttingen	DE	cryoNERVE	In situ structural basis of human axonopathies	LS1
GASPERINI	Debora	Leibniz-Institut für Pflanzenbiochemie	Leibniz Institute of Plant Biochemistry	DE	MECHANOJAS	Unravelling biophysical signals governing phytohormone production and plant acclimation	LS3

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HACKETT	James	European Molecular Biology Laboratory	European Molecular Biology Laboratory	DE	ModLogic	Systematically Dissecting the Regulatory Logic of Chromatin Modifications	LS2
HACQUARD	Stéphane	Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.	Max Planck Society	DE	MICROBIOSIS	The Microbiota-Root-Shoot Axis in Plant Health and Disease	LS8
HU	Marian	Die Universität Kiel	The University of Kiel	DE	CarboCell	Vesicular mechanisms of carbon fixation in calcifying cells of marine animals	LS8
HUCH	Meritxell	Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.	Max Planck Society	DE	REG_ORGatSCALE	Mechanisms of liver regeneration and disease across scales; from molecules to cells and tissue	LS3
ITO	Hiroshi	Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.	Max Planck Society	DE	MentalTravel	Neural Circuits Enabling Navigational Simulations	LS5
KAUFER	Benedikt	Freie Universität Berlin	Free University of Berlin	DE	ENDo-HERPES	Endogenous Human Herpesvirus: Germ line integration and effects on host cell and organism	LS6
MACKE	Jakob	Eberhard Karls Universität Tübingen	University of Tübingen	DE	DeepCoMechTome	Using deep learning to understand computations in neural circuits with Connectome-constrained Mechanistic Models	LS5
MAEGDEFESSEL	Lars	Klinikum rechts der Isar der Technischen Universität München	University Hospital Rechts der Isar	DE	LongTx	Targeting long non-coding RNAs for novel treatment strategies in vascular diseases	LS7
MASON	Annaliese	Rheinische Friedrich-Wilhelms-Universität Bonn	University of Bonn	DE	SAMEY	Stabilising autopolyploid meiosis for enhanced yield	LS2
MERKEL	Olivia	Ludwig-Maximilians-Universität München	University of Munich (LMU)	DE	RatInhalRNA	Rational and Simulation-Supported Design of Inhalable RNA Nanocarrier	LS7
MOHAMMADI	Siawoosh	Universitätsklinikum Hamburg-Eppendorf	University Hospital Hamburg	DE	MRStain	Non-invasive staining of tissue microstructure in temporal lobe epilepsy using in-vivo MRI	LS7
ORI	Alessandro	Leibniz-Institut für Alternsforschung - Fritz-Lipmann-Institut Ev	Leibniz Institute on Aging - Fritz Lipmann Institute Ev	DE	ComplexAge	Vulnerability of protein complexes and organelles to protein degradation impairment in aging neurons	LS2

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OWALD	David	Charité - Universitätsmedizin Berlin	Charité - University Hospital	DE	SimpleMinds	Simple minds – competition of parallel neural filters in behaviour selection of Drosophila	LS5
PAPENFORT	Kai	Friedrich-Schiller-Universität Jena	Friedrich Schiller University of Jena	DE	ArtRNA	Artificial RNA regulators to probe, control, and design gene regulatory networks in bacteria	LS9
SCHRAMEK	Daniel	Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.	Max Planck Society	DE	InVivoVeritas	Using CRISPR to elucidate novel cancer genes and selective therapeutic vulnerabilities directly in mice	LS4
STUKENBROCK	Eva	Die Universität Kiel	The University of Kiel	DE	FungalSecrets	The role of plant microbiota in the evolution of fungal pathogens and their repertoires of secreted proteins	LS8
TANG	T-Y Dora	Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.	Max Planck Society	DE	MinSynCell	Unravelling the chemical-physical principles of life through minimal synthetic cellularity	LS1
UHLENHAUT	Nina Henriette	Technische Universität München	Technical University of Munich	DE	GRACE	The Glucocorticoid Receptor in Aging and Circadian Endocrinology	LS4
WOLF	Elmar	Julius-Maximilians-Universität Würzburg	University of Wurzburg	DE	PROTAC-PDAC	Targeted Protein Degradation as a New Experimental and Therapeutic Approach for Pancreatic Ductal Adenocarcinoma	LS4
CIAMPI DE ANDRADE	Daniel	Aalborg Universitet	Aalborg University	DK	PersoNINpain	Personalized Non-Invasive Neuromodulation in Pain	LS7
GERHART-HINES	Zachary Philip	Københavns Universitet	University of Copenhagen	DK	HEAT-UP	Harnessing an energy-expenditure, appetite-suppressing fat-brain axis to unlock novel pharmacotherapies	LS4
SPEED	Doug	Aarhus Universitet	Aarhus University	DK	ClassifyDiseases	Develop tools that use genetic data to better classify complex human diseases	LS2

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TSOUMAKIDOU	Maria	Biomedical Sciences Research Center Alexander Fleming	Biomedical Sciences Research Center Alexander Fleming	EL	artFibro	Artifying fibroblasts: Perturbation modelling in the lung tumor phase space to rewire fibroblasts for immunotherapy	LS6
ASTIZ	Mariana	Achucarro Basque Center for Neuroscience	Achucarro Basque Center for Neuroscience	ES	StarTicking	The early ticking of the central circadian pacemaker: when and how	LS5
BOKE	Elvan	Centre de Regulació Genòmica (CRG)	Centre for Genomic Regulation	ES	ACTIVEDORMANCY	Molecular mechanisms through which oocytes evade ageing	LS3
MAGRACH	Ainhoa	Klima Aldaketa Ikergai	Basque Centre for Climate Change	ES	GorBEEa	Understanding biodiversity-ecosystem function and biodiversity-stability relationships across spatial and organizational scales	LS8
SAN MILLAN	Alvaro	Agencia Estatal Consejo Superior de Investigaciones Científicas	Spanish National Research Council (CSIC)	ES	PLAS-FIGHTER	Exploiting plasmid–bacteria interactions to fight the evolution of antimicrobial resistance	LS8
SANCHEZ	Alvaro	Agencia Estatal Consejo Superior de Investigaciones Científicas	Spanish National Research Council (CSIC)	ES	ECOPROSPECTOR	Mapping vast functional landscapes with single-species resolution: a new approach for precision engineering of microbial consortia	LS8
SUPEK	Fran	Fundacio Privada Institut de Recerca Biomedica IRB	Institute for Research in Biomedicine	ES	STRUCTOMATIC	Mutational processes and impact of structural variants in somatic cells	LS2
VERRELST	Jochem	Universitat de València	University of Valencia	ES	FLEXINEL	FLEX-based inferring of terrestrial photosynthesis dynamics for quantifying European vegetation productivity	LS9
KRONHOLM	Illiaka	Jyväskylän Yliopisto	University of Jyväskylä	FI	EPISTAT	Role of epistatic interactions in evolution	LS8
BOUVIER	Julien	Centre National de la Recherche Scientifique (CNRS)	National Center for Scientific Research (CNRS)	FR	ReticulOme	Multi-omics characterization of descending motor circuits in the brainstem	LS5
CHIKHI	Rayan	Institut Pasteur	Pasteur Institute	FR	IndexThePlanet	Planetary-scale indexing of sequencing data	LS2

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DECELLE	Johan	Centre National de la Recherche Scientifique (CNRS)	National Center for Scientific Research (CNRS)	FR	SymbiOCEAN	Structural and Metabolic connection in oceanic plastid symbioses	LS8
HASHEM	Yaser	Institut national de la santé et de la recherche médicale	National Institute of Health and Medical Research (INSERM)	FR	SpicTrans	Species-specific aspects in eukaryotic mRNA translation modulation and their implications in diseases	LS1
HELFT	Julie	Institut national de la santé et de la recherche médicale	National Institute of Health and Medical Research (INSERM)	FR	FOLOME	Role of tissue-resident FOLR2+ Macrophages as Organizers of the Tumor Immune MicroEnvironment	LS6
LAGUETTE	Nadine	Centre National de la Recherche Scientifique (CNRS)	National Center for Scientific Research (CNRS)	FR	SENTINEL	Charting Cell Type-Specific Nucleic Acid Immunity	LS6
LAINE	Elodie	Sorbonne Université	Sorbonne University	FR	PROMISE	Proteome diversification in evolution	LS1
LEVAYER	Romain	Institut Pasteur	Pasteur Institute	FR	PrApEDoC	Predicting Apoptosis Engagement Downstream of Caspases <i>in vivo</i>	LS3
LLAURENS	Violaine	Centre National de la Recherche Scientifique (CNRS)	National Center for Scientific Research (CNRS)	FR	OUTOFTHEBLUE	Evolutionary feedback between traits and species diversification: convergence and divergence in sympatric butterflies of the Amazonian rainforest	LS8
MAÎTRE	Jean-Léon	Centre National de la Recherche Scientifique (CNRS)	National Center for Scientific Research (CNRS)	FR	EpiPhys	Physics of the first mammalian epithelium	LS3
MANCIO SILVA	Liliana	Institut national de la santé et de la recherche médicale	National Institute of Health and Medical Research (INSERM)	FR	DEXES	Mechanisms of dormancy, activation and sexual conversion in pre-erythrocytic malaria parasites	LS6
SHADE	Ashley	Centre National de la Recherche Scientifique (CNRS)	National Center for Scientific Research (CNRS)	FR	MicroRescue	Resolving mechanisms of microbiome rescue to promote resilience to climate change	LS8
WILLIAMSON	Adam	Institut national de la santé et de la recherche médicale	National Institute of Health and Medical Research (INSERM)	FR	EMUNITI	Epilepsy Treatment Using Neuromodulation by Non-Invasive Temporal Interference Stimulation	LS7

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NAGY	Laszlo	MTA Szegedi Biológiai Kutatóközpont	Biological Research Centre, Hungarian Academy of Sciences	HU	CONVERGENCE	Major transitions made easy? In search of genetic preconditions that help the repeated evolution and loss of fungal multicellularity	LS8
DOYLE	Sarah	Trinity College Dublin	Trinity College Dublin	IE	NK InSight	Exploring Natural Immunity in Retinal Neovascular Disease	LS4
AMDURSKY	Nadav	Technion - Israel Institute of Technology	Technion - Israel Institute of Technology	IL	ProtonsInProteins	A novel approach for studying biological proton transfer: Protein incorporation of noncanonical amino acids carrying a light-triggered proton donor and proton acceptor	LS9
BEN-ZVI	Ayal	The Hebrew University of Jerusalem	The Hebrew University of Jerusalem	IL	CNS Hidden Door	Uncovering molecular and cellular mechanisms of immune cell trafficking across the blood-CSF barrier in autoimmunity	LS5
DAHAN	Rony	Weizmann Institute of Science	Weizmann Institute of Science	IL	ImmuneSynapsEngagers	Immune Synapse Engagement as a Novel Approach for Cancer Immunotherapy	LS7
ELKOURBY	Yaniv	The Hebrew University of Jerusalem	The Hebrew University of Jerusalem	IL	ZygoCiliaAct	A Newly Identified Cilium in Meiosis - Deciphering the Principles and Mechanisms of the Zygote Cilium	LS3
GOSHEN	Inbal	The Hebrew University of Jerusalem	The Hebrew University of Jerusalem	IL	ASTROCYTES-REWARD	Astrocytes in Reward and their Bidirectional Relationship with the Dopaminergic System	LS5
HANNA	Yaqub	Weizmann Institute of Science	Weizmann Institute of Science	IL	ExUteroEmbryogenesis	Towards Artificial Human Embryoid Models: Engineered and Synthetic Platforms for Ex Utero Mammalian Embryogenesis	LS9
LANDAU	Meytal	Technion - Israel Institute of Technology	Technion - Israel Institute of Technology	IL	FuncAmyloid	Structure, Function and Regulation of Antimicrobial and Virulent Amyloids at High-resolution	LS1
LANDSMAN	Limor	Tel Aviv University	Tel Aviv University	IL	PIIN_T2D	Diabetes: pericyte-orchestrated islet inflammation as a driver of beta-cell failure	LS4

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REGEV-RUDZKI	Neta	Weizmann Institute of Science	Weizmann Institute of Science	IL	MalChemAtlas	The malaria chemical atlas: Revealing the parasite-host functional interactome	LS6
ROLLS	Asia	Technion - Israel Institute of Technology	Technion - Israel Institute of Technology	IL	NEUROFASCIA	Neuronal control of fascia	LS5
ROSENWASSER	Shilo	The Hebrew University of Jerusalem	The Hebrew University of Jerusalem	IL	AgriRedox	Improving crop productivity by relieving the inhibitory effect imposed on photosynthesis by the redox regulatory network	LS9
SCHROEDER	Avi	Technion - Israel Institute of Technology	Technion - Israel Institute of Technology	IL	Smart Nanoparticles	4D Brain-Targeting Nanomedicines for Treating Neurodegeneration	LS7
YOSEF	Nir	Weizmann Institute of Science	Weizmann Institute of Science	IL	Tx-phylogeography	High throughput phylogeography of tumors: how the tissue environment influences cancer evolution?	LS2
BIENKO	Marzena Magda	Fondazione Human Technopole	Human Technopole	IT	RADIALIS	Illuminating radial genome organization in the nucleus	LS2
BOLLATI	Valentina	Università degli studi di Milano	University of Milan	IT	MAMELI	MAppling the Methylation of repetitive elements to track the Exposome effects on health: the city of Legnano as a Lliving lab	LS7
MELIS	Miriam	Università degli Studi di Cagliari	University of Cagliari	IT	REDIRECT	Resolving sEx DiffeREnces in proCessing sensory informaTion	LS5
OSTUNI	Renato	Universitá Vita-Salute San Raffaele	Vita-Salute San Raffaele University	IT	MEFHISTO	Decoding and targeting the PGE2-MEF2A axis in tumor-associated macrophages	LS7
MANN	Ritse	Stichting Radboud Universitair Medisch Centrum	Radboud University Medical Center	NL	SAFE-MRI	Screening And Future Enhanced MRI	LS7
ZEEV-BEN-MORDEHAI	Tzviya	Universiteit Utrecht	Utrecht University	NL	GettingInShape	Shaping the future – From spermatids to spermatozoa	LS1
WOOD	Shona	Universitetet i Tromsø	University of Tromsø	NO	HiTime	Hibernation timing to reveal mechanisms of rheostasis	LS4
CHIAPPE	M Eugenia	Fundação Champalimaud	Champalimaud Foundation	PT	ECoFly	Neural Circuits for Error Correction	LS5
BECH	Martin	Lunds universitet	Lund University	SE	AXES.Histo	Advanced X-ray Energy-sensitive Microscopy for Virtual Histology	LS7

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ELSÄSSER	Simon	Karolinska Institutet	Karolinska Institute	SE	ChromaDYN	Quantitative multimodal pulse-and-label time-resolved chromatin maps	LS2
BELL	Jordana	King's College London	King's College London	UK	BACMETH	Bacterial methylation of the human gut microbiome in response to diet for improvement of cardio-metabolic health	LS7
CAI	Yizhi	University of Manchester	University of Manchester	UK	GREAT	Genome Refactoring and Engineering Approach to study non-coding genes driving Translation	LS9
DING	Yiliang	John Innes Centre	John Innes Centre	UK	VENTURE	Investigating the role of RNA structure in mRNA Export	LS1
HODSON	Daniel	University of Cambridge	University of Cambridge	UK	Unwind-Lymphoma	RNA helicases; switched parologue dependency as an exploitable vulnerability in aggressive B cell lymphoma.	LS4
LAURENTI	Elisa	University of Cambridge	University of Cambridge	UK	HEXAGEN	Harnessing haematopoietic stem cell EX vivo Adaptation for GENe therapy	LS7
MCGOVERN	Naomi	University of Cambridge	University of Cambridge	UK	PMDR	Placental macrophages: Their development and role in the placenta	LS6
PAGLIARA	Stefano	University of Exeter	University of Exeter	UK	DYNBIOTICS	Understanding the dynamics of antibiotics transport in individual bacteria	LS1
SALEEM	Aman	University College London	University College London	UK	LEARNSPACE	Learning to Represent Space in the Brain	LS5
SARRIS	Milka	University of Cambridge	University of Cambridge	UK	LongWayFromFlam	The uncharted journeys of inflammatory cells and their functional implications	LS4
VITAL	Edward Marc	University of Leeds	University of Leeds	UK	PREVENT-SLE	Towards PREdiction and preVENTion of Systemic Lupus Erythematosus	LS7