

ERC SCIENTIFIC COUNCIL

Strategy Note

ERC peer review panel structure – Starting Grants

The ERC's peer review process will be carried out by panels of independent high level scientists and scholars, supported by written reports of referees. The Scientific Council has come to an initial agreement on the structure of panels for the evaluation of "Starting Independent Researcher Grants" under the ERC's first call for proposals. This structure responds to a series of *overriding principles* that were taken into account in the decision making process.

Coherence is essential in the design of all structures and operations of the ERC. The mandate of the ERC covers research in all fields of sciences and humanities, with funding decisions based only on excellence. This reflects an overarching vision of research as a unitary activity of the creative mind transcending the particularities of broad domains and individual disciplines. It also reflects the critical role of interdisciplinarity and the constantly evolving nature of disciplines.

The ERC has been set up with high hopes and great ambitions, and has set amongst its goals the instigation of **transformative changes** in the European research landscape. The Scientific Council aims to set new examples and standards by sending forceful signals for such transformative changes that track and support changes in the sciences themselves.

The panel structure chosen reflects a **forward-looking approach** to science and research. The focus is on bottom-up top quality, leading edge, innovative research, as reflected in the term that describes the ERC's remit: frontier research. The innovative structure of the panels signals openness to changes in paradigm and revolutionary rather than ordinary science.

The ongoing evolution of scientific disciplines also demands that the panel structure includes an appreciation for **interdisciplinarity**. Early on, the Scientific Council decided to keep the number of panels low, to promote such interdisciplinarity and a wide breadth of viewpoints within each panel.

The emphasis on excellence, independent of any other priority, leads naturally to a **funding allocation independent of panel structure**. This will be further guaranteed by retaining sufficient unallocated funds to support on a competitive basis highly meritorious proposals that bridge panels.

The panels themselves are to be interpreted in a **flexible and inclusive** manner with adequate space and arrangements for cross panel and interdisciplinary proposals. Furthermore the panel themselves will be adapted as necessary to the realities faced by the ERC during the evaluation process itself, including the number and distribution of proposals received. The Scientific Council is confident that the fundamental principles used in designing the panel structure are sound and robust and will enable an optimal evaluation process.

Initial Peer Review Panel Structure for ERC Starting Grants

SH1 Individuals and organisations: Economics, management, demography, geography, urban and environmental studies.

SH2 Institutions, behaviour, values and beliefs: Anthropology, sociology, political science, law, communication, social studies of science and technology.

SH3 The human mind and its complexity: Cognition, linguistics, psychology and philosophy.

SH4 Cultures and cultural diversity: Literature, visual and performing arts, music and cultural studies.

SH5 The study of the past and of cultural artefacts: Memory, history and archaeology.

PE1 Mathematical foundations: Pure and applied mathematics, theoretical computer science and mathematical physics.

PE2 Fundamental constituents of matter: High energy, particle, nuclear, plasma, atomic, molecular, gas and optical physics.

PE3 Structures and reactions: Condensed matter (structure, electronic properties, fluids,...), statistical physics, nanosciences, reactions.

PE4 Material sciences and methods: Material sciences, molecular architecture, analytical chemistry, synthesis (both inorganic and organic) and theory, physical and environmental chemistry, method development.

PE5 Information and communication: Informatics and information systems, communication technology, computer science, intelligent systems.

PE6 Engineering sciences: Electronics, product design, process design & control, construction methods, fluid and solid mechanics, energy systems, bio-engineering.

PE7 Universe sciences: Astro-physics/chemistry/biology/geology; solar system; stellar, galactic and extragalactic astronomy; cosmology; space sciences, instrumentation.

PE8 Earth system science: Physical geography, geology, geophysics, oceanography, climatology, ecology, global change, biogeochemical cycles, natural resources.

LS1 Molecular, cellular and developmental biology: Biochemistry, molecular biology, metabolism, cell biology, signal transduction, embryology, structural biology.

LS2 Genetics, genomics, bioinformatics and systems biology: Molecular genetics, cell genetics, genomics, transcriptomics, metabolomics, computational biology, biostatistics, biological modelling.

LS3 Organismic physiology, including infection and immunity: Organogenesis, organ physiology, endocrinology, ageing, toxicology, parasitology, microbiology, virology, immunology.

LS4 Neurosciences: Neurobiology, neuroanatomy, neurophysiology, neurochemistry, neuropharmacology, systems neuroscience, neuroimaging.

LS5 Evolutionary, population and environmental biology: Evolution, adaptation, population biology, biodiversity, ecotoxicology, marine biology, radiation biology, environmental risks, environmental medicine.

LS6 Applied medical and health sciences: Clinical medicine, public health, psychiatry, surgery, epidemiology, biomedical engineering, veterinary medicine, pharmacology, medical ethics.

LS7 Applied biology and bioengineering, including agricultural sciences and biotechnology: Genetic engineering, GMOs, synthetic biology, plant biology, fisheries, forestry, environmental biotechnology, industrial biotechnology, biomaterials, biohazards.