

## SCIENTIFIC FIELDS ELIGIBLE FOR OWSD FUNDING

NB: The list of sub-discipline areas is <u>not exhaustive</u> and is intended as indicative, in order to help applicants determine the most appropriate category for the purposes of their application.
It is up to the applicant to identify which scientific area best fits their project, in order to ensure that the reviewer(s) is able to evaluate the scientific question adequately.
The online application forms allow the applicant to indicate if the project is multi-disciplinary.

## **LIFE SCIENCES**

High-level discipline groups as per OWSD online application forms	Research areas that can be included under high-level discipline groups
Biological Systems and Organisms Structural, Cell and Molecular Biology	Molecular biology, Biochemistry, Structural Biology and Molecular Biophysics: molecular synthesis and modification, mechanisms and interactions, biochemistry, structural biology, molecular biophysics signalling pathways
	<b>Genetics, 'Omics', Bioinformatics and Systems</b> <b>Biology</b> : molecular genetics, quantitative genetics, genetic epidemiology, epigenetics, genomics, metagenomics, transcriptomics, proteomics, metabolomics, glycomics, bioinformatics, computational biology, biostatistics, systems biology
	<b>Cellular and Developmental Biology</b> : cell biology, cell physiology, signal transduction, organogenesis, developmental genetics, pattern formation and stem cell biology
	<b>Ecology, Evolution and Environmental Biology</b> : population biology, community and ecosystem ecology, evolutionary biology, behavioural ecology, microbial ecology
	Synthetic Biology
Medical and Health Sciences	<b>Physiology, Pathophysiology and Endocrinology</b> : organ physiology, pathophysiology, endocrinology, metabolism, ageing, tumorigenesis, cardiovascular diseases, metabolic and other syndromes

	<b>Immunity and Infection</b> : the immune system and related disorders, biology of infectious agents and infection, biological basis of prevention and treatment of infectious diseases
Medical and Health Sciences Neurosciences	<b>Medical Sciences</b> : applied medical technologies, diagnostics, therapies, development of tools for diagnosis, monitoring and treatment of diseases, pharmacology, clinical medicine, regenerative medicine
	<b>Neuroscience and Neural Disorders</b> : neural cell function and signalling, systems neuroscience, neural bases of cognitive and behavioural processes, neurological and psychiatric disorders
Agricultural Sciences + Biological Systems and Organisms Structural, Cell and Molecular Biology Engineering Sciences	Applied Life Sciences, Agriculture, Biotechnology, and Molecular and Biosystems Engineering: applied plant and animal sciences, forestry, food sciences, applied/molecular biotechnology, environmental, and marine biotechnology, bioprocess engineering, biomass and biofuels, biohazards

## PHYSICAL SCIENCES AND ENGINEERING

High-level discipline groups as per OWSD online application forms	Research areas that can be included under high-level discipline groups
Mathematical Sciences	<b>Mathematics</b> : all areas of mathematics, pure and applied, plus mathematical foundations of computer science, mathematical physics and statistics
Physics	<b>Condensed Matter Physics</b> : structure, electronic properties, fluids, nanosciences, biological physics
	Fundamental Constituents of Matter: particle, nuclear, plasma, atomic, molecular, gas, and optical physics

<b>Chemical Sciences</b> + Physics	<b>Synthetic Chemistry and Materials</b> : materials synthesis, structure-properties relations, functional and advanced materials, molecular architecture, organic chemistry
	Physical and Analytical Chemical Sciences: analytical chemistry, chemical theory, physical chemistry/chemical physics
Astronomy, Space and Earth Sciences + Agricultural Sciences Biological Systems and Organisms	<b>Earth System Science:</b> physical geography, geology, geophysics, atmospheric sciences, oceanography, climatology, cryology, ecology, global environmental change, biogeochemical cycles, natural resources management
	<b>Universe Sciences:</b> astro-physics/chemistry/ biology; solar system; stellar, galactic and extragalactic astronomy, planetary systems, cosmology, space science, instrumentation
Computing and Information Technology + Engineering Sciences	<b>Computer Science and Informatics</b> : data science, scientific computing, machine learning, robotics, artificial intelligence
	Systems and Communication Engineering: electrical, electronic, and optical engineering
<b>Engineering Sciences</b> + Chemical Sciences Agricultural Sciences Medical and Health Sciences	<b>Products and processes engineering</b> : product design, process design and control, construction methods, civil engineering, energy processes, material engineering
	Industrial, Mechanical, Chemical Engineering: mining and petroleum engineering, forest industry engineering, environmental engineering
	Medical Engineering