

Center for Scientific Review - HNG

(1) Provides staff support to the Office of the Director, NIH, in the formulation of grant and award policies and procedures; (2) provides central receipt of all PHS applications for research and research training support, and makes initial referral to PHS components; (3) assigns NIH applications to supporting institutes, centers, and divisions and to CSR initial review groups; and (4) provides for scientific review of NIH research grants, National Research Service Awards, and research career development applications.

Office of the Director - HNG1

(1) Plans, directs, and coordinates the work of the Center; (2) provides advisory and consultative services on NIH grant and award programs to NIH components, advisory councils, and grantee institutions; (3) directs the evaluation of the status of support and accomplishments in selected research areas; (4) directs the development of the scientific review mission of the Center; (5) directs the search for the most qualified and representative individuals to serve as members of initial review groups; (6) directs staff compliance with federal ethics laws, regulations and policies; and (7) directs the Center's program to provide equal employment opportunities, upward mobility, and employee training.

Division of Planning, Analysis and Information Management – HNG14

(1) Establishes comprehensive long-range plans for continuous and rigorous evaluation of the quality of the Peer Review Process; (2) develops tools, software, and platforms to advance CSR initiatives and improve the quality of peer review; (3) applies modern data science to identify areas of concern and strategies for improvement; (4) plans and executes foundational support for data-driven decision-making and transparency; (5) Uses proactive risk management strategies to protect CSR-sensitive data and data acquired through data-sharing agreements.

Division of Basic and Integrative Biological Sciences - HNG2

(1) Conducts the scientific merit review of biochemistry, biophysics, chemistry, cell development and function, genetics, and microbiology research grant applications submitted to NIH; (2) coordinates with the Division of Receipt and Referral to assure the appropriate assignment of applications to the Initial Review Groups of the Division; (3) administers the scientific review groups that provide scientific review of research grant, fellowship, and research career development applications; (4) recommends policies and procedures governing NIH extramural activities related to the scientific and technical review of applications within the purview of the Division; (5) provides recommendations on each application to the appropriate Institute and/or National Advisory Council; (6) reviews the state-of-the-art and identifies research needs in the scientific disciplines represented by the Division; and (7) performs on-site assessments of the research capabilities of applicants.

Biological Chemistry and Macromolecular Biophysics Integrated Review Group - HNG23

(1) Reviews research applications on biochemical, biophysical, and chemical approaches to biomedical problems; (2) has special expertise in macromolecular mechanisms, biochemistry, chemistry, structural biology, enzymology, biophysical methods, and the theory underlying the function of biological molecules and their interactions; (3) encompasses the basic physical sciences that underlie biology at the molecular level; and (4) bridges the development of technologies with a molecular focus and their application to biological problems.

Cell Biology Integrated Review Group - HNG24

(1) Reviews research applications that focus broadly on the study of fundamental cell biological processes, including the functions, interactions and regulation of cells and cellular organelles; (2) reviews applications that involve a variety of disciplines including (a) biochemistry; (b) biophysics; (c) chemistry; and (d) genetics; (3) uses a variety of techniques including (a) microscopy; (b) genomics; (c) proteomics; and (d) computational techniques, with the primary goal of better understanding cell functions; and (4) includes the Biology and Diseases of the Posterior Eye (BDPE) study section.

Genes, Genomes and Genetics Integrated Review Group - HNG25

Reviews research applications on fundamental and applied aspects of genes, genomes and genetics of humans and other organisms. Reviews applications concerned with: (1) fundamental mechanisms and regulation of gene expression, including (a) chromosome function and maintenance and (b) the regulation of DNA and RNA metabolism, translation, and posttranslational modification; (2) genomic studies, computational biology and technology development, including (a) development of new genetic tools and resources, (b) global analysis of genetic systems, (c) biological and computational resource development, and (d) classification, storage, access, analysis and integration of genetic and other biological information; (3) genetic variation and evolution including the description, analysis and modeling of induced and natural genome variation, and comparisons between species; (4) all aspects of quantitative genetics including complex trait mapping in humans and a wide variety of other species; (5) the involvement of genetics in human health and disease, including (a) the discovery, application and interpretation of gene and genomic variation influencing phenotype, and (b) the development of experimental and computational approaches to the identification of disease-related genes; (6) proposals dealing with model systems of all organisms, as they relate to human health and disease; and (7) translational genetic studies applying fundamental genetic insight into the clinical setting.

Bioengineering Sciences and Technologies Integrated Review Group - HNG2B

The Bioengineering Sciences and Technologies (BST) IRG conducts the scientific merit review of research grant applications that focus on fundamental aspects of bioengineering and technology development in the following areas: gene and drug delivery systems, imaging principles for molecules and cells, modeling of biological systems, bioinformatics, statistics and data management, instrumentation, chips and microarrays, biosensors, and biomaterials.

Interdisciplinary Molecular Sciences and Training Integrated Review Group - HNG2C

Reviews crosscutting basic and integrative biology grant applications that focus either on application of emerging technologies to biological problems or on training in the basic and integrative biological sciences. The scientific areas are broad and would include: biological chemical and macromolecular biophysics, bioengineering, cell biology genes, genomes and genetics and basic and translational oncology.

Oncology 1 – Basic Translational Integrated Review Group - HNG2D

Reviews applications involving basic and early translational investigations that encompass cancer initiation, promotion, and progression. Specifically, the OBT IRG reviews research grant applications related to cellular and molecular aspects of cancer pathology; chemical carcinogenesis; cancer genetics; oncogenes and tumor suppressors regulation; tumor biology; and translation of basic research to preclinical studies.

Division of Physiological and Pathological Sciences - HNG3

(1) Conducts the scientific merit review of AIDS and related research, endocrinology and reproductive, immunological, infectious diseases and microbiology, nutritional and metabolic, and oncological sciences research grant applications submitted to NIH; (2) coordinates with the Division of Receipt and Referral to assure the appropriate assignment of applications to the Integrated Review Groups of the Division; (3) administers the scientific review groups that provide scientific review of research grant, fellowship, and research career development applications; (4) recommends policies and procedures governing NIH extramural activities related to the scientific and technical review of applications within the purview of the Division; (5) provides recommendations on each application to the appropriate Institute and/or National Advisory Council; (6) reviews the state-of-the-art and identifies research needs in the scientific disciplines represented by the Division; and (7) performs on-site assessments of the research capabilities of applicants.

Infectious Diseases and Immunology B - HNG34

The IDIB IRG reviews grant applications broadly focused on infectious diseases and immunology, addressing the immune system's role in host interactions with infectious agents and the mechanisms and treatment of diseases when the immune system has a major role, including autoimmunity, immune-mediated diseases, and immune tolerance. Also included are basic science, pre-clinical, and clinical studies of the pathogenesis of HIV/AIDS associated pathogens and cancers, co-infection with other infectious disease, and co-morbidities associated with chronic infections of HIV.

Infectious Diseases and Immunology A - HNG35

The IDIA IRG reviews grant applications broadly focused on infectious diseases and immunology, covering virology and viral pathogenesis (including HIV), bacteriology and bacterial pathogenesis, fungal pathogenesis, parasitology and parasitic diseases, cellular and molecular immunology, and fundamental aspects of the innate and adaptive immune system.

Endocrinology, Metabolism, Nutrition, and Reproductive Sciences Integrated Review

Group - HNG38

(1) Reviews applications addressing molecular, cellular, and higher order hormone-regulated processes in physiology and pathophysiology; (2) evaluates applications on basic and clinical aspects of hypothalamic, pituitary, gonadal, thyroid, and adrenal physiology and pathophysiology, diabetes mellitus, the biology of the pancreatic islet (beta cell), adipocyte biology (obesity), and other metabolic disorders including inborn errors of metabolism and nutrient transport disorders; (3) reviews applications addressing the biology of reproduction and the pathobiology of its disorders; (4) studies the role of nutrition under normal and pathological conditions; and (5) reviews applications involving integrative physiology and pathophysiology such as neuroendocrinology; humoral actions on the gut, lung and heart; cancers of the endocrine glands; as well as studies related to the effects and mechanisms of action of drugs, biopharmaceuticals, alcohol and toxicants, xenobiotics and endobiotics on reproduction or on endocrine glands.

Digestive, Kidney and Urological Systems Integrated Review Group - HNG39

Reviews applications on basic and clinical aspects of gastrointestinal, hepatobiliary, pancreatic, kidney, urinary tract and male genital system physiology and pathobiology, as well the disposition and action of nutrients and xenobiotics. In addition, the DKUS IRG will review applications aimed at development and evaluation of new techniques, therapies and treatment related to the disorders of the GI tract, hepatobiliary, pancreas, kidney, urinary tract, and male genital system. Investigators may employ a broad range of basic and clinical research methods including pharmacologic, chemical and biochemical approaches, genetics, genomics and proteomics, molecular and cell biology techniques and animal models. Patient-oriented studies including pediatric gastroenterology, renal, urinary and male genital system are included in this IRG, but large population studies and randomized clinical trials involving digestive disorders, kidney, urinary and male genital system will be reviewed elsewhere.

Division of Physiological and Pathological Sciences - HNG3A

(1) Conducts the scientific merit review of digestive, kidney and urological systems, endocrinology, metabolism, nutrition and reproductive sciences, infectious diseases, microbiology, immunology, and disease control, and the biologically-focused HIV/AIDS research grant applications submitted to NIH; (2) coordinates with the Division of Receipt and Referral to assure the appropriate assignment of applications to the Integrated Review Groups of the Division; (3) administers the scientific review groups that provide scientific review of research grant, fellowship, and research career development applications; (4) recommends policies and procedures governing NIH extramural activities related to the scientific and technical review of applications within the purview of the Division; (5) provides recommendations on each application to the appropriate Institute and/or National Advisory Council; (6) reviews the state-of-the-art and identifies research needs in the scientific disciplines represented by the Division; and (7) performs on-site assessments of the research capabilities of applicants.

Division of Translational and Clinical Sciences - HNG4

(1) Conducts the scientific merit review of cardiovascular, musculoskeletal and dental, neurological, pathophysiological, and sensory sciences research grant applications submitted to NIH; (2) coordinates with the Division of Receipt and Referral to assure the appropriate assignment of applications to the Initial Review Groups of the Division; (3) administers the scientific review groups that provide scientific review of research grant, fellowship, and research career development applications; (4) recommends policies and procedures governing NIH extramural activities related to the scientific and technical review of applications within the purview of the Division; (5) provides recommendations on each application to the appropriate Institute and/or National Advisory Council; (6) reviews the state-of-the-art and identifies research needs in the scientific disciplines represented by the Division; and (7) performs on-site assessments of the research capabilities of applicants.

Musculoskeletal, Oral and Skin Sciences Integrated Review Group - HNG45

The Musculoskeletal, Oral and Skin Sciences IRG conducts the scientific merit review of research grant applications that address structural systems that are prerequisite for physical form, mechanical function, movement, and integrity of the body, including autoimmune diseases.

Vascular and Hematology Integrated Review Group - HNG48

The Hematology IRG conducts the scientific merit review of research grant applications ranging from basic research through clinical studies focused on hematopoiesis, blood cells and their diseases and studies of normal and pathologic hemostasis and thrombosis.

Cardiovascular and Respiratory Sciences Integrated Review Group - HNG4A

Reviews applications that employ basic investigations, translational approaches and patient-oriented studies to focus on the development, physiology, and pathophysiology of the cardiac and pulmonary systems. Cardiac study sections are organized around themes of cardiac development, muscle contraction including cardiac hypertrophy and failure, cardiovascular electrophysiology and arrhythmias, myocardial ischemia and metabolism and include a study section devoted to clinical investigation. Respiratory study sections focus on inflammation and immune dysfunctions in the lung, lung injury, repair and remodeling, and the integrative biology and control mechanisms of the lung and its related organs and tissues. Investigators may employ a range of approaches that include genetics, genomics and proteomics, molecular, cell, and computational biology, biochemistry, biophysics and bioengineering, imaging, analyses of model organisms, and human studies.

**Surgical Sciences, Biomedical Imaging and Bioengineering Integrated Review Group -
HNG4B**

Oncology 2 – Translational Clinical Integrated Review Group - HNG4C

Reviews applications involving translational and clinical investigations that encompass cancer prevention, progression, diagnosis and treatment. Specifically, the OTC IRG reviews research grant applications related to inhibition of cancer progression; radiation effects; mechanism of action of cancer therapeutic agents in both in vitro and in vivo model systems; development and evaluation of experimental therapies of neoplastic diseases, translation of research to clinical practice; development or optimization of treatment modalities; chemoprevention; and development of biomarkers/signatures for tumor detection and diagnosis. Research grant applications and all small business applications (SBIR and STTR) focused on cancer research and development will be reviewed in the OTC IRG.

Division of AIDS, Behavioral and Population Sciences - HNG5

(1) Conducts the scientific merit review of biobehavioral and social sciences, health promotion and disease prevention, surgery, radiology and bioengineering research grant applications submitted to NIH; (2) coordinates with the Division of Receipt and Referral to assure the appropriate assignment of applications to the Initial Review Groups of the Division; (3) administers the scientific review groups that provide scientific review of research grant, fellowship, and research career development applications; (4) recommends policies and procedures governing NIH extramural activities related to the scientific and technical review of applications within the purview of the Division; (5) provides recommendations on each application to the appropriate Institute and/or National Advisory Council; (6) reviews the state-of-the-art and identifies research needs in the scientific disciplines represented by the Division; and (7) performs on-site assessments of the research capabilities of applicants.

Biobehavioral and Behavioral Processes Integrated Review Group - HNG53

The Behavioral and Biobehavioral Processes IRG reviews grant applications on behavioral and biobehavioral processes across the lifespan. Research on non-human animals as well as humans is included, and both normal and disordered processes are addressed. While the focus is on behavior, studies may also consider related central, autonomic, neuroendocrine, immune, neural, hormonal, motor, and genetic issues. Neuroimaging and molecular and/or behavioral genetic approaches may be employed.

Risk, Prevention and Health Behavior Integrated Review Group - HNG55

The Risk, Prevention and Health Behavior IRG reviews grant applications covering a wide range of biological, psychological, cultural and social conditions and traits that affect the manifestation, prevention, treatment or management of physical and mental diseases and disorders. Emphasis may be placed on individual behavior, interpersonal relations, or group contexts. Populations studied may include clinic, community diagnosed, symptomatic and high-risk groups, and research may be concentrated on specific age groups or address questions of change or transition across the life course. Interventions may be purely behavioral, or may involve non-behavioral elements such as pharmacological treatments and devices.

Population Sciences and Epidemiology Integrated Review Group - HNG59

Reviews grants and cooperative agreement applications and contract proposals for research related to (1) behavioral genetics and epidemiology; (2) cardiovascular and sleep epidemiology; (3) epidemiology of cancer; (4) infectious diseases, reproductive health, asthma and pulmonary; (5) kidney, nutrition, obesity and diabetes; (6) neurological, aging and musculoskeletal epidemiology; (7) social sciences and populations studies; and (8) related population sciences initiatives.

Healthcare Delivery and Methodologies Integrated Review Group - HNG5B

Reviews grants and cooperative agreement applications and contract proposals for research related to (1) biostatistical methods and research design; (2) community-level health promotion; (3) community influences on health; (4) health services organization and delivery; (5) nursing science; (6) biomedical computing and health informatics; (7) health of the population small business activities; and (8) related community prevention, nursing and health informatics initiatives.

Division of Receipt and Referral - HNG7

(1) Receives and reviews applications for PHS research and training support to determine referral to the appropriate PHS health agencies and to the appropriate NIH initial review groups; (2) develops criteria for determining appropriate assignment of grant applications within the PHS by program areas and by competencies of review groups; (3) proposes uniform instructions to applicants for proper preparation of applications; and (4) extracts and records preliminary data from such applications and serves as information center for applications pending review.

Division of Management Services - HNG8

(1) Advises the Director, CSR, on administrative matters; (2) plans and directs management functions of the Center including administrative services, financial management, committee management, information technology services, procurement, management analysis, and preparation of reports and statistics related to Center activities; (3) evaluates developments in administrative management and their implications on the Center's mission; (4) develops policies on administrative management and prepares and issues procedures and guidelines for implementation of administrative policies; and (5) serves as the Center focal point for coordination of activities with NIH and DHHS offices and other Federal agencies.

Administrative Services Branch - HNG82

(1) Provides administrative services, which include procurement, property, space management, security, telecommunications, mail, payroll/time and attendance, and general office services; (2) analyzes and prepares reports concerning administrative and management functions; (3) performs receipt and initial processing of research grant application deliveries; and (4) maintains liaison with other service components of NIH to ensure effective coordination of procedures and services.

Financial Management Branch - HNG84

(1) Develops, prepares, and executes all operating budget material throughout the budget cycle for the Center; (2) establishes systems for effective control of funds; and (3) serves as the principal advisory body within the Center for financial matters.

Committee Management Branch - HNG85

(1) Provides Committee Management support to the CSR in all matters pertaining to the operation of Advisory Committees; (2) is responsible for keeping the CSR Director and other professional staff informed as to new regulations and policies; (3) responds to directives of the Federal Advisory Committee Act (FACA); (4) prepares all required reports such as the President's Annual Report, the annual Financial Operating Plan, etc.

Scientific Review Evaluation Activity Management and Service Center - HNG87

(1) Develops, prepares, and executes all budgetary material throughout the budget cycle for the Scientific Review and Evaluation Activities (SREA) budget; (2) serves as a NIH-wide service center for SREA; (3) establishes systems for effective control of SREA funds and, in coordination with the CSR Budget Officer, prepares an annual budget; (4) serves as the initial advisory body within the Center for travel matters; (5) processes travel orders and vouchers for Federal employees and Federal consultants; and (6) assists the CSR Committee Management Office with the collection and input of review-related cost data for FOP reporting purposes.

Division of Neuroscience, Development and Aging - HNG9

(1) Conducts the scientific merit review of brain disorders and clinical neuroscience; integrative, functional and cognitive neuroscience; molecular, cellular and developmental neuroscience; emerging neuroscience and technology; and the biology of development and aging, research grant applications submitted to NIH; (2) coordinates with the Division of Receipt and Referral to assure the appropriate assignment of applications to the Integrated Review Groups of the Division; (3) administers the scientific review groups that provide scientific review of research grant, fellowship, and research career development applications; (4) recommends policies and procedures governing NIH extramural activities related to the scientific and technical review of applications within the purview of the Division; (5) provides recommendations on each application to the appropriate Institute and/or National Advisory Council; (6) reviews the state-of-the-art and identifies research needs in the scientific disciplines represented by the Division; and (7) performs on-site assessments of the research capabilities of applicants.

Emerging Technologies and Training in Neurosciences Integrated Review Group - HNG92

Reviews grants and cooperative agreement applications and contract proposals for research relating to (1) the crosscutting technologies that serve all of the neurosciences, including neuroinformatics and imaging and molecular neurogenetics; (2) crosscutting emerging science in the small business area for all the neurosciences; and (3) the training areas for all of the neurosciences.

Brain Disorders and Clinical Neuroscience Integrated Review Group - HNG93

The Brain Disorders and Clinical Neuroscience [BDCN] IRG reviews grant applications that have neural disorders and/or injury of the nervous system as their main focus. Investigations appropriate for review in the BDCN IRG may include those using animal models of neural injury or disease, investigations based on the study of specific patient populations, or investigations focused on the development of rehabilitative and therapeutic strategies. Specific areas of interest include the investigation of traumatic brain or spinal cord injury, the consequences of episodes of ischemia or hypoxia, the study of mental disorders, neurodegenerative diseases, and other neuropathies. These Specific areas of interest may be studied from the perspective of neuroanatomical or neurophysiological alterations, changes in neurotransmitter or neurotrophin function or metabolism, the genetic, cellular, or molecular basis of alterations induced by disease or injury, the influence or involvement of the immune or vascular systems in a neural disease process or response, and the neurological basis of addictive, cognitive, behavioral, and emotional disorders.

Molecular, Cellular and Developmental Neuroscience Integrated Review Group - HNG94

The Molecular, Cellular and Developmental Neuroscience IRG reviews grant applications on the structure and function of neuronal, glial, and other excitable cells, as well as the development of both the central and the peripheral nervous systems, inclusive of the visual system and other excitable cells. Excitable cells, in addition to neural cells, include endocrine and neuroendocrine cells, pancreatic beta-cells, chromaffin cells, muscle cells, neuromuscular junctions, etc. Areas of interest include the functional characteristics of ion channels, the mechanisms by which extra- and intracellular signals are transduced and the functional characteristics of the transducers themselves, general mechanisms underlying the process of cell death, analyses of neural cell lineage, factors that specify or influence neuronal migration pathways or axonal pathfinding, processes that involve the maturation of neurons and glia, the information of patterns and boundaries that lead to the development of adult brain regions and nuclei, and other aspects of the basic cellular and molecular physiology of neurons and glia. Projects reviewed may be relevant to disorders or injuries, but their emphasis lies less in gaining an understanding of the disorder or its manifestations that on revealing the basic biological processes that underlie or may be altered in disorder.

Integrative, Functional, and Cognitive Neuroscience Integrated Review Group - HNG95

The Integrative, Functional, and Cognitive Neuroscience IRG reviews grant applications within a very wide range of neuroscience research aimed at furthering our understanding of how the nervous system is organized and functions at an integrative, systems level. Specific areas include: studies of the neural basis of emotional and motivational behavior; regulation of function, at the systems level, by neuroendocrine and neuroimmune influences; the analysis of system function under varying behavioral states, such as sleep and hibernation; the basis of biological rhythms; the maintenance of homeostasis; chemosensation, hearing, balance, touch, somatosensation, and visual perception; motor systems and sensorimotor integration; the integration of multisensory information; the development and alteration of memory and other cognitive processes that accompany aging; computational and theoretical models of cognitive processes; mechanisms underlying neural coding of complex stimuli (e.g., pattern recognition, spatial transformations, speech perception); and attention and its effects on information processing in the nervous system. Research proposed in applications reviewed by study sections in the emphasis would be on the effect of the process on the structure or function of the system under investigation, rather than on the disease process itself.

Biology of Development and Aging Integrated Review Group - HNG96

The Biology of Development and Aging IRG conducts the scientific merit review of research grant applications that are focused on development and/or aging and that employ approaches at a variety of levels from molecules to whole organisms. Development and Aging are inherently integrative research areas focusing on biological changes over time. Proposals in this IRG will frequently transcend the boundaries of single organs or systems.