

National Institute of General Medical Sciences - HNS

Administers, fosters, and supports research in the basic and general medical sciences and in related natural or behavioral sciences which have significance for two or more other institutes, or are outside the general area of responsibility of any other institute. Programs are carried out through: (1) grants and contracts to, and cooperative agreements with, scientific institutions, commercial organizations, and individuals for the support of both basic biomedical research and applied research and development, including broad multi-disciplinary research programs; and (2) individual and institutional research training awards.

Office of the Director - HNS1

(1) Plans, directs, and coordinates the development and progress of Institute programs; (2) provides consultative services and research information to other NIH components, Federal and non-Federal organizations, and for guidance of the National Advisory General Medical Sciences Council; (3) directs evaluation of the status of support and accomplishments of Institute program areas; (4) provides internal management, research reports, and administrative services to the Institute; and (5) directs and manages the Institute's Equal Employment Opportunity (EEO) Program.

Office of Administrative Management - HNS12

(1) Advises the Director on administrative matters; (2) plans and directs management functions of the Institute including financial management, personnel management, material procurement, office services, management analysis, and reports and statistics relating to the Institute's administrative activities; (3) interprets, analyzes, and implements administrative orders and management concepts affecting the mission of the Institute; and (4) maintains and operates data collection, processing, and retrieval systems covering all aspects of NIGMS programs.

Administrative Services Branch - HNS122

(1) Serves as the coordinating point to provide overall administrative support services, advice, and policy and procedure information to the Institute staff in areas that include procurement, travel, timekeeping, space management, property management, photocopy services, and other day-to-day administrative support; (2) provides administrative services and resources to the Institute and analyzes effects of changes in administrative policies and procedures outside of NIGMS; and (3) is responsible for execution of the Research Management and Support and Intramural budgets.

Financial Management Branch - HNS123

(1) Serves as principal advisor to the Institute Director, Deputy Director, and Division Directors in the financial management aspects of the planning, formulation, execution, and evaluation of the Institute's research grant, research training grant, research associate, and contract programs; (2) collaborates with program planning staff in the development and coordination of Institute programs with the budget process; (3) formulates and monitors the Institute's financial management program and establishes a system of effective control of funds utilized through grants and contractual processes; (4) is responsible for: (a) providing budget guidance to NIGMS program areas, (b) compiling and preparing the Institute budget and assuring that the budget meets the needs of the Institute management in controlling the financial aspects of its diverse and complex research programs; (5) is responsible for devising accounting systems for NIGMS that are beneficial in obtaining data for management decisions, and at the same time sufficiently compatible with the central NIH accounting system so that dual reporting does not exist; (6) develops budget back-up material for OMB and Congressional appropriation hearings and assists in the briefing of witnesses in defense of the budget before NIH, PHS, DHHS, and Congress; (7) serves as a focal point for the monitoring and clearance of budgetary and fiscal data as the result of Congressional and public inquiries; and (8) provides fact-finding, evaluative, and advisory staff services to the Division Directors.

Information Resources Management Branch - HNS125

(1) Provides consultative services to the various Institute program areas for the design of information resource management systems and related analytical studies; (2) maintains and operates systems for the collection, processing, and retrieval of information relating to all relevant aspects of Institute programs; (3) provides fact-finding, evaluative, and advisory staff services to the Institute Director, Division Directors, Office Chiefs, upper level Institute management, and NIH regarding information management issues or systems; (4) provides mainframe, personal computing, and local area network software and equipment support to Institute staff; and (5) collaborates with staff of other NIH institutes, centers and divisions in information management projects of mutual interest and represents the Institute on various NIH committees and work groups concerned with information resource management.

Office of Communications and Public Liaison - HNS13

(1) Communicates the goals and results of NIGMS-supported research and provides information about NIGMS's mission, programs, activities, and initiatives to the general public and specific target audiences, both directly and via intermediaries, such as the news media; (2) advises the Director and other NIGMS staff on communication matters and, as appropriate, assists NIGMS staff in meeting their communication needs; (3) assures compliance with NIH and Departmental procedures for the review and clearance of public materials, including manuscripts, speeches, and publicly available electronic documents; and (4) serves as the contact point for members of the public who wish to communicate with NIGMS staff, and also facilitates collaborative relationships between NIGMS and the many publics it serves.

Office of Program Planning, Analysis, and Evaluation - HNS14

(1) Advises the Director on issues related to program planning, analysis, evaluation, data collection, predictive modeling, science policy, and legislative functions; (2) advises the Director and senior staff in the development of strategic, research, and operational program plans to meet the long range goals and immediate objectives of the Institute; (3) develops the Institute's evaluation plan and program and oversees its application, including evaluating the focus and impact of ongoing programs and providing analytical reports of program trends and future forecasts; (4) prepares analyses comparing the distribution of funds among research areas which serve as a basis for budget projections; (5) prepares reports and analyses concerning the scientific and budgetary aspects of Institute-funded research including research grants, center grants, research contracts, and training programs; (6) develops predictive models based on available data to predict outcomes of proposed changes to the Institute's programs and research portfolio; and (7) coordinates required data reporting and responds to legislative requests for the Institute.

Office of Scientific Review - HNS15

(1) Directs and carries out the scientific and technical merit review of research training, research support, research center, research conference, and research program project grant applications; (2) originates and coordinates policies and procedures of the Cellular and Molecular Basis of Disease, Genetic Basis of Disease, and Pharmacological Sciences review committees, Minority Access to Research Careers and Minority Biomedical Research Support review subcommittees, and any necessary ad hoc committees; (3) conducts the search for the most qualified and representative individuals to serve as members of review committees and site visitors; and (4) organizes and coordinates site visits and scientific and technical merit reviews.

Division of Pharmacology, Physiology and Biological Chemistry - HNS2

(1) Plans, directs, and administers a program of research grants, contracts, and institutional and individual fellowship awards designed to support research and research training that: (a) enhances therapeutics through increased understanding of drug action and improved methodologies for the generation of drugs, (b) fosters the integration and application of physiological and biochemical research in addressing clinical problems such as those that occur as a result of trauma and burns; (c) fosters the development and application of chemical and biochemical techniques to biological problems, as well as the development and application of theory derived from chemical and biochemical principles; (2) analyzes national research efforts in anesthesiology, biochemistry, biotechnology, chemistry, pharmacology, physiology, trauma, burns, and related areas, and makes recommendations to assist the National Advisory General Medical Sciences Council and other advisory committees and groups appointed to participate in decisions about areas of new or continuing program emphasis, or to determine relative scientific merit of grant applications; (3) identifies and stimulates research areas in anesthesiology, biochemistry, biotechnology, chemistry, pharmacology, physiology, trauma, and burn in which increased effort would most effectively contribute to better understanding of biological processes in normal and diseased states and to the generation of new therapies; (4) manages an inter-institute intramural postdoctoral staff fellowship program with research efforts in pharmacological sciences and clinical pharmacology; and (5) advises universities, other centers of medical research, and professional and lay organizations about the content and research needs of the Division.

Biochemistry and Biorelated Chemistry Branch - HNS22

(1) Plans, directs, and administers a program of research grants, contracts, and institutional and individual fellowship awards intended to foster high quality research in biochemistry (including bioenergetics, mechanistic enzymology, and cellular metabolism), biorelated chemistry (including synthesis and methodology, bioinorganic, bioorganic, and medicinal chemistry), and biotechnology;(2) analyzes national research efforts in biochemistry, biorelated chemistry, and biotechnology and makes recommendations to assist the National Advisory General Medical Sciences Council, other advisory committees, and groups appointed to participate in decisions regarding new or continuing program emphasis, or to determine the relative scientific merit of applications for grant support; (3) maintains surveillance over new research developments and identifies needs for research in areas such as biochemistry, biorelated chemistry, and biotechnology; and (4) advises universities, other centers of medical research, and professional and lay organizations about research needs and requirements of the Branch.

Pharmacological and Physiological Sciences Branch - HNS23

(1) Plans, directs, and administers a program of research grants, contracts, and institutional and individual fellowship awards intended to foster high quality research in pharmacology, anesthesiology, and such areas as physiology, biochemistry, and cell biology that have the potential for direct and purposeful application to specific clinical areas including studies of trauma and burns. Other areas of research interest are biomaterials, behavioral sciences, and adaptation; (2) analyzes national research efforts in pharmacology, anesthesiology, physiology, trauma, burns, and related areas and makes recommendations to assist the National Advisory General Medical Sciences Council, other advisory committees, and groups appointed to participate in decisions regarding new or continuing program emphasis, or to determine the relative scientific merit of applications for grant support; (3) maintains surveillance over new research developments and identifies needs for research in areas such as pharmacology, anesthesiology, physiology, trauma, burns, and related areas; and (4) advises universities, other centers of medical research, and professional and lay organizations about research needs and requirements of the Branch.

Division of Genetics and Molecular, Cellular, and Developmental Biology - HNS3

(1) Plans and directs a program of research grants, contracts to support research and research training directed toward gaining a better understanding of the cellular and molecular mechanisms that underlie inheritance, gene expression and development. The results of this research form the foundation for advances in diagnosing, preventing, treating and curing a wide variety of diseases. ; (2) analyzes national research efforts on the broad areas of genetics and molecular, cellular and developmental biology and makes recommendations to assist the NIGMS and NIH directors, the National Advisory General Medical Sciences Council or other advisory committees or groups appointed to (a) participate in decisions about new or continuing areas of program emphasis, or (b) determine the relative scientific merit of applications for grant support; (3) maintains up to date knowledge of over new research developments and identifies the need for research in the areas of genetics and molecular, cellular and developmental biology; and (4) advises universities, other centers of medical research, and professional and lay organizations about research needs and requirements of the Division.

Genetic Mechanisms Branch - HNS33

(1) Plans, directs, and administers a program of research grants, contracts, institutional training grants, and individual fellowship awards intended to foster quality research in such areas as replication, recombination, and repair of DNA; transcription; RNA processing, protein synthesis; rearrangement of genetic elements; extrachromosomal inheritance; and population genetics and evolution; (2) analyzes national research efforts in relevant subject matter areas and makes recommendations to assist the National Advisory General Medical Sciences Council, other advisory committees, and groups appointed to participate in decisions about areas of new or continuing program emphasis, or to determine the relative scientific merit of applications for grant support; (3) maintains surveillance over new developments and identifies need for research in areas within the scope of the Branch's interests; and (4) advises universities, other centers of medical research, and professional and lay organizations about research needs and requirements of the Branch.

Developmental and Cellular Processes Branch - HNS34

(1) Plans, directs, and administers a program of research grants, contracts, institutional training grants, and individual fellowship awards intended to foster quality research in such areas as cell cycle control; cell growth and differentiation; developmental genetics; neurogenetics and the genetics of behavior; physiological adaptation; and chromosomal organization and mechanics; (2) analyzes national efforts in relevant subject matter areas and makes recommendations to assist the National Advisory General Medical Sciences Council, other advisory committees, and groups appointed to participate in decisions about areas of new or continuing program emphasis, or to determine the relative scientific merit of applications for grant support; (3) maintains surveillance over new developments and identifies need for research in areas within the scope of the Branch's interests; and (4) advises universities, other centers of medical research, and professional and lay organizations about research needs and requirements of the Branch.

Cell Biology Branch -HNS35

(1) Plans, directs, and administers a program of research grants, contracts, and institutional and individual fellowship awards intended to support research on the cell and subcellular components, including basic research on all types of cells, as well as research focused on specific cells and their function in excised and intact tissues and organisms. Of interest are questions which pertain to specific cell types or components which are of a fundamental or general nature; research involving basic cellular or subcellular structure and function; and the development of new methods and techniques to investigate the above. The nature of investigations and methods covered ranges from the most precise physical-chemical approaches to all manner of inter-cellular communications and their importance in varied cell disease states; (2) analyzes national research efforts in the broad area of cell biology and makes recommendations to assist the National Advisory General Medical Sciences Council, other advisory committees, and groups appointed to participate in decisions about areas of new or continuing program emphasis, or to determine the relative scientific merit of applications for grant support; (3) maintains surveillance over new research developments and identifies needs for research in the broad field of cell biology and related areas of science to be incorporated into the investigative approaches. Also, considers research manpower efforts for future research trends; and (4) advises universities, other centers of research, and professional and lay organizations about research needs and requirements of the Branch.

Division of Training, Workforce Development, and Diversity - HNS5

(1) Serves as the focal point for the Institute's efforts to foster research training and facilitate the development of a diverse and inclusive biomedical research workforce; (2) oversees and coordinates NIGMS policies related to diversity activities, research training programs, and workforce development efforts; (3) implements strategic plans to improve the effectiveness of NIGMS' diversity and training programs; (4) promotes biomedical research workforce diversity through innovative approaches, including programs to increase the competitiveness of faculty at institutions from states with limited NIH research support; and (5) collaborates with NIH, DHHS, and other agencies, as well as the extramural scientific community on these matters.

Predocctoral Basic Biomedical and Medical Science Training Programs - HNS52

This branch serves as the focal point for the Division's work to develop the capabilities of institutions to train predoctoral students. The Branch (1) Plans and directs a suite of programs, including competitive individual fellowships and institutional basic biomedical research training and medical science training programs to develop the capabilities of institutions to train predoctoral students, including those from populations that are not yet well represented among NIH research grantees; (2) formulates general policy, administrative arrangements, and scientific considerations within which the programs operate, and advises universities, other centers of biomedical research, and professional and lay organizations of these parameters; (3) analyzes research training support efforts for predoctoral students sponsored by other organizations and agencies, with the intent to foster and encourage development and implementation of such programs and their complementarity with NIGMS programs to enhance the quality of research training; and (4) maintains surveillance over, and analyzes, the quality of biomedical training activities.

Postdoctoral, Early Career, and Workforce Development - HNS53

This branch serves as the focal point for the Division's work support postdoctoral or early career investigator training, and to develop the capabilities of institutions to train postdoctoral researchers and early career investigators. The Branch (1) Plans and directs a suite of programs, including competitive individual and institutional, research, research training, fellowship, career development, research project and research education grants to support postdoctoral or early career investigator training, and to develop the capabilities of institutions to train postdoctoral researchers and early career investigators, including those from populations and institutions that are not yet well represented among NIH research grantees; (2) directs ancillary training activities including supplements to help achieve diversity, as well as conferences and workshops; (3) supports basic research that informs interventions needed for the development of a strong, diverse biomedical research workforce; (4) formulates general policy, administrative arrangements, and scientific considerations within which the programs operate, and advises universities, other centers of biomedical research, and professional and lay organizations of these parameters; (5) analyzes research training support efforts for postdoctoral and early career researchers sponsored by other organizations and agencies, with the intent to foster and encourage development and implementation of such programs and their complementarity with NIGMS programs to enhance the quality of research training; (6) maintains surveillance over, and analyzes, the quality of biomedical training activities; and (7) manages the NIGMS Intramural Postdoctoral Research Associate Training (PRAT) Fellows Program.

Undergraduate and Predoctoral Cross-Disciplinary Training - HNS55

This branch serves as the focal point for the Division's work to support undergraduate, post-baccalaureate, and predoctoral cross-disciplinary research training. The Branch (1) Plans and directs a suite of programs, including institutional research training, and research education grants to support undergraduate, post-baccalaureate, and predoctoral cross-disciplinary research training, and to develop the capabilities of institutions to train these individuals, including those from populations that are not yet well represented among NIH research grantees; (2) formulates general policy, administrative arrangements, and scientific considerations within which the programs operate, and advises universities, other centers of biomedical research, and professional and lay organizations of these parameters; (3) analyzes research training support efforts for undergraduates, post-baccalaureate, and predoctoral students sponsored by other organizations and agencies, with the intent to foster and encourage development and implementation of such programs and their complementarity with NIGMS programs to enhance the quality of research training; and (4) maintains surveillance over, and analyzes, the quality of biomedical training activities.

Division of Extramural Activities - HNS6

(1) Maintains an overview of the scientific and financial status of the Institute's programs to produce effective advice to the Director in the planning, development, and scientific administration of Institute program areas; (2) stimulates interaction and exchange of information between program areas to promote understanding of the Institute's long-range plans for program balance; (3) interprets effect of proposals for long-term support on projected Institute plans; (4) recommends budget allocations for the various programs; (5) represents the Institute at Extramural Program Management Committee (EPMC) and other meetings dealing with proposed or revised grant policy and procedures; (6) monitors and acts as liaison with other institutes and divisions for activities relating to grant application assignments, foreign travel, and foreign grants; (7) advises staff about regulatory and legislative developments affecting program operations and gives guidance on operational policies to assure uniformity of management; and (8) supervises grants management, processing, and award activities.

Grants Administration Branch - HNS62

(1) Participates in the development of Institute policies on the business management aspects of grant and fellowship programs; (2) develops guidelines, procedures, and internal controls to ensure proper and continuing implementation of NIGMS, NIH, PHS, and DHHS policies; (3) is responsible for the business management of the Institute's grant programs including negotiation of awards; (4) implements and executes the PHS National Research Service Award requirements, including payback to ensure compliance by all trainees and fellows who have received NRSA support from the Institute; (5) processes all documentation necessary for administration of Institute grant programs; (6) participates in awarding functions, authorizing awards and changes to active awards; and (7) prepares and distributes grant-related materials required by the NIGMS Advisory Council and attends the Council meetings, initial review group meetings, and project site visits as a management resource. (1) Provides leadership for a national program to increase knowledge and advance effective strategies to deal with problems and issues in the promotion of mental health and the prevention and treatment of mental illness; (2) conducts and supports research.

Division of Biophysics, Biomedical Technology, and Computational Biosciences - HNS7

(1) Plans, directs, and administers a program of research grants, contracts, center grants, and institutional and individual fellowship awards to support research that: (a) fosters development of computational modeling and simulation tools, (b) promotes bioinformatics and data sciences in support of NIGMS missions, (c) supports the generation of mathematical models of biological networks, and (d) fosters development of new technologies and tools for the study of macromolecular, cellular and organelle processes and function and (e) supports the development of biophysical methods and tools for understanding basic biological questions; (2) defines the Institute's needs for database development and applications, as well as collaborates with other NIH components and federal agencies in developing policies in this area; (3) coordinates the activities of the Biomedical Information Science and Technology Initiative (BISTI) and the trans-NIH Biomedical Information Science and Technology Initiative Committee (BISTIC) with related activities of other federal agencies, NIH institutes, and public and private entities; (4) analyzes national research efforts directed toward the study of the above and makes recommendations to assist the National Advisory General Medical Sciences Council or other advisory committees or appointed groups to (a) participate in decisions about new or continuing areas of program emphasis, or (b) determine the relative scientific merit of applications for grant support; (5) maintains up to date knowledge over new research developments and identifies the need for research in the area of computational analysis, biophysical methods and technology development of biological systems at the cellular, subcellular, and physiological systems levels; and (6) advises universities, other centers of biomedical research, and professional and lay organizations about research needs and requirements of the Division (7) Coordinates the Networking and Information Technology Research and Development (NITRD) activities across NIH and through the federal government.

Bioinformatics and Computational Biology Branch - HNS72

(1) Plans, directs, and administers a program of research grants, contracts, and other funding mechanisms to support research and research training that: (a) fosters research that lead to the develop of algorithms and tools for the management, visualization, and analysis of scientific data sets, and the integration of data across domains of interest to the NIGMS research community, in order to maximize the value of high-throughput and complex data collection for the biomedical research enterprise; (b) defines the Institute's needs for database development and identifies opportunities for sustainable maintenance of those databases of critical importance to the Institute; (c) fosters systems biology approaches at the cellular, subcellular, physiological and population scales, including the development of models and algorithms related to network organization and dynamic processes; (d) fosters development of modeling and simulation tools across areas of interest to the Institute; (e) fosters development of methods for the analysis and dissemination of computational models; and (f) encourages the adoption of sound software engineering practices and rigorous statistical analyses in NIGMS sponsored research; (2) collaborates with other NIH components and federal agencies in developing policies in these areas, including software and data sharing policies; (3) analyzes national research efforts directed toward the study of the above and makes recommendations to assist the National Advisory General Medical Sciences Council or other advisory committees or appointed groups to (a) participate in decisions about new or continuing areas of program emphasis, or (b) determine the relative scientific merit of applications for grant support; (4) provides, as needed, guidance to other NIGMS research Divisions to evaluate the bioinformatics and computational components of projects across the Institute; (5) maintains surveillance over new research developments and identifies the need for research in the broad area of bioinformatics, as well as training needs; and (6) provides information to third parties such as universities, other centers of biomedical research, and professional and lay organizations about research needs and requirements of the Branch.

Biomedical Technology Branch - HNS73

(1) Plans, directs, and administers a program of research grants, contracts, and other funding mechanisms to foster the development of new or improved technologies for biomedical research - such as high performance computing, molecular imaging, structural biology and proteomics - which could be used by a wide range of biomedical or clinical researchers to advance biomedical research, and which are not limited to a specific organ or disease; (2) supports research, development and access to sophisticated technologies through Biomedical Technology Resource Centers; (3) analyzes national research efforts directed toward applicable technology development and makes recommendations to assist the National Advisory General Medical Sciences Council or other advisory committees or appointed groups to (a) participate in decisions about new or continuing areas of program emphasis, or (b) determine the relative scientific merit of applications for grant support; (4) provides, as needed, guidance to other NIGMS research Divisions to evaluate the technology components of projects across the Institute; (5) maintains surveillance over new research developments and identifies the need for research and development in the broad area of biomedical technology; and (6) provides information to third parties such as universities, other centers of biomedical research, and professional and lay organizations about research needs and requirements of the Branch.

Biophysics Branch - HNS74

(1) Plans, directs, and administers a program of research grants, contracts, and institutional and individual fellowship awards intended to foster high quality research in the areas of: (a) the development and application of physical and theoretical techniques to biological problems, and (b) the application of engineering science and technology to the development of improved methods of measurement and analysis for physiological and biomedical research. Of interest are new applications of established techniques, the modification of existing instrumentation to yield improved resolution, sensitivity or accuracy, and the development of new methods for the investigation of molecular structures and interactions. Applications to fundamental biological research are emphasized. Research activities receiving support include physical and chemical studies on the structure of proteins and nucleic acids, and studies of structural features that determine macromolecular conformation. Also included are spectroscopy, X-ray and other scattering techniques, electron and optical microscopy, computational approaches as they relate to protein and nucleic acid structure and function, methodology and technology development in proteomics, single molecule techniques, nanotechnology, and bioanalytical techniques; (2) analyzes national research efforts in structural biology, instrumentation design, development, and modification, and makes recommendations to assist the National Advisory General Medical Sciences Council, other advisory committees, and groups appointed to participate in decisions regarding new or continuing program emphasis, or to determine the relative scientific merit of applications for grant support; (3) maintains surveillance over new research developments and identifies need for research in structural biology and instrumentation; and (4) advises universities, other centers of research, and professional and lay organizations about research needs and requirements of the Branch.

Division for Research Capacity Building – HNS8

(1) Plans and directs programs in non-profit organizations in states that are not well represented in the NIH research portfolio to conduct sustainable high quality research in basic, translational, and clinical sciences; supports innovative competitive individual and institutional research grants that develop capabilities of academic institutions that historically have trained students from underrepresented groups; (2) Develops best practices, mentoring and professional development tools, workflows, databases, and analysis tools that provide an infrastructure for biomedical research; implements programs that serve unique populations, such as rural and medically underserved communities; (3) Formulates general policies within which the programs operate; and advises other agencies, academic and/or other centers of biomedical research, and professional and lay organizations of these policies; (4) Fosters development, networking, coordination, and sharing of research resources and expertise that expand research opportunities and increase the number of competitive investigators; (5) Analyzes research support efforts sponsored by other organizations and agencies, with the intent to encourage development and implementation of such programs to complement other NIGMS programs and to enhance the capacity for high quality research; (6) Coordinates co-funding of meritorious research grants by the categorical institutes of the NIH, which encourages these institutes to support projects within their missions in states that do not receive a high level of NIH research support; and (7) Coordinates co-funding of applications to increase research competitiveness of faculty at institutions that have a historical mission focused on serving students from diverse backgrounds; as well as partnerships between American Indian/Alaskan Native tribes or tribal based organizations and research intensive institutions.