

TÍTULO DE LA ACCIÓN	Pathophysiology of Bisphosphonates-associated Osteonecrosis of the Jaw (R01)
CÓDIGO IDENTIFICATORIO DE LA ACCIÓN	Program Announcement (PA) Number: PA-07-132
FECHA DE PUBLICACIÓN	Release/Posted Date: December 7, 2006
FECHA DE CIERRE DE SOLICITUDES	Opening Date: January 5, 2007 (Earliest date an application may be submitted to Grants.gov) Letters of Intent Receipt Date(s): Not Applicable NOTE: On time submission requires that applications be successfully submitted to Grants.gov no later than 5:00 p.m. local time (of the applicant institution/organization). Application Submission/Receipt Date(s): Standard dates apply, please see http://grants1.nih.gov/grants/funding/submissionschedule.htm Peer Review Date(s): Standard dates apply, please see http://grants1.nih.gov/grants/funding/submissionschedule.htm#reviewandaward Council Review Date(s): Standard dates apply, please see http://grants1.nih.gov/grants/funding/submissionschedule.htm#reviewandaward Earliest Anticipated Start Date(s): Standard dates apply, please see http://grants1.nih.gov/grants/funding/submissionschedule.htm#reviewandaward Additional Information To Be Available Date (URL Activation Date): Not Applicable Expiration/Closing Date: July 2, 2009
ORGANISMO CONVOCANTE	National Institutes of Health (NIH), (http://www.nih.gov) National Institute of Dental and Craniofacial Research (NIDCR), (http://www.nidcr.nih.gov). National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS), (http://www.niams.nih.gov). National Cancer Institute (NCI), (http://www.nci.nih.gov).
TEMÁTICA	Research Objectives Purpose: The purpose of this Funding Opportunity Announcement (FOA) is to stimulate research to determine the pathophysiology of ONJ, a morbid bone disorder that is associated with bisphosphonate use. Bisphosphonates are prescribed to alleviate bone pain in certain cancer patients, or to reduce bone loss in osteoporotic or osteopenic individuals. Recent reports suggest that there is an association between the use of bisphosphonates and ONJ in a subset of these patients. Whether bisphosphonates are causal to the development of ONJ remains to be determined, and the physiological mechanisms by which ONJ manifests in bisphosphonate users are unknown. Although there is a knowledge base on the effects of bisphosphonates on bone quality and strength, there is a gap in our understanding of how bisphosphonates may interfere with bone healing and repair at the genetic, molecular, cellular and tissue levels. Therefore, we seek to support basic and translational studies that will address the knowledge gap and enhance our understanding of this clinical entity related to bisphosphonate therapy. This knowledge could also serve as the basis for the prediction, prevention, diagnosis, and treatment of this condition.
SUBTEMÁTICA	Scope and Objectives: This FOA encourages investigations in the 1) characterization of the relationship between bisphosphonate use and ONJ in animal models, 2) genetic, molecular and cellular basis of jaw-specific impaired bone healing in the presence of bisphosphonates, 3) pharmacogenetics of bisphosphonates underlying the development of ONJ, 4) contribution of other pharmacological or bone active factors on the development of ONJ, and 5) cumulative effects of dose, exposure and type of bisphosphonates on the development of ONJ. Human subject research, as well as the use of appropriate animal models, is acceptable. Examples of research topics that would fill the knowledge gap include but are not limited to: <ul style="list-style-type: none"> ?? Clarification of the direct and indirect effects of bisphosphonates on oral bone homeostasis and healing ?? Determination of the bioavailability of bisphosphonates in oral bones ?? Determination of genetic variations that contribute to the development of ONJ ?? Characterization of the molecular mechanisms of action of bisphosphonates leading to the development of ONJ ?? Characterization of the cellular basis of ONJ ?? Characterization of the combinatorial actions of bisphosphonates and other pharmacological or local bone active factors ?? Characterization of factors that protect against the development of ONJ Projects must focus on studying oral bone homeostasis, healing response or repair capacity in the presence or absence of bisphosphonates rather than on the broad effects of bisphosphonates on bone

	<p>quality. Projects that examine the effects of bisphosphonates on skeletal biology will not be considered unless the experimental design includes analysis of oral bones. Projects may study the effects of bisphosphonates on other physiological processes such as angiogenesis but only within the context that perturbation of these processes may compromise oral bone homeostasis and healing. Projects that examine the pharmacology of bisphosphonates will be considered non-responsive unless the projects propose to test whether genetic variations alter the pharmacokinetics or pharmacodynamics of bisphosphonates. Epidemiological studies are non-responsive.</p> <p>This FOA is intended to accelerate discoveries so that we can better predict who may benefit from bisphosphonate treatment without accompanying risk of ONJ, who may be prone to adverse events, and how to overcome bisphosphonate-associated ONJ. Knowledge gained from these studies may pave the way for personalized recommendations for bisphosphonate therapy, including guidance for patients on oral health care prior to and during bisphosphonate use and new strategies for the prevention and intervention of bisphosphonate-associated ONJ, while also managing bone cancer pain or osteoporotic bone loss.</p>
<p>PECULIARIDADES</p>	<p>Other-Special Eligibility Criteria</p> <p>Projects must focus on studying oral bone homeostasis, healing response or repair capacity in the presence or absence of bisphosphonates rather than on the broad effects of bisphosphonates on bone quality. Projects that examine the effects of bisphosphonates on skeletal biology will not be considered unless the experimental design includes analysis of oral bones. Projects may study the effects of bisphosphonates on other physiological processes such as angiogenesis but only within the context that perturbation of these processes may compromise oral bone homeostasis and healing. Projects that examine the pharmacology of bisphosphonates will be considered non-responsive unless the projects propose to test whether genetic variations alter the pharmacokinetics or pharmacodynamics of bisphosphonates. Epidemiological studies are non-responsive.</p> <p>Applicants may submit more than one application, provided each application is scientifically distinct.</p>
<p>CONDICIONES DE PARTICIPACIÓN</p>	<p>Eligible Institutions</p> <p>You may submit an application(s) if your institution/organization has any of the following characteristics:</p> <ul style="list-style-type: none"> ?? Public/State Controlled Institution of Higher Education ?? Private Institution of Higher Education ?? Nonprofit with 501(c)(3) IRS Status (Other than Institution of Higher Education) ?? Nonprofit without 501(c)(3) IRS Status (Other than Institution of Higher Education) ?? For-Profit Organization (Other than Small Business) ?? State Government ?? Non-domestic (non-U.S.) Entity (Foreign Organization) ?? Regional Organization <p>Eligible Individuals</p> <p>Any individual(s) with the skills, knowledge, and resources necessary to carry out the proposed research as the PD/PI is invited to work with his/her organization to develop an application for support. Individuals from underrepresented racial and ethnic groups as well as individuals with disabilities are always encouraged to apply for NIH support.</p> <p>More than one PD/PI, or multiple PDs/Pis, may be designated on the application for projects that require a "team science" approach that clearly does not fit the single-PD/PI model. Additional information on the implementation plans and policies and procedures to formally allow more than one PD/PI on individual research projects is available at http://grants.nih.gov/grants/multi_pi. All PDs/Pis must be registered in the NIH eRA Commons prior to the submission of the application (see http://era.nih.gov/ElectronicReceipt/preparing.htm for instructions).</p>
<p>AVANCE SOBRE FINANCIACIÓN</p>	<p>Funds Available</p> <p>Because the nature and scope of the proposed research will vary from application to application, it is anticipated that the size and duration of each award will also vary. Although the financial plans of the Institutes/Centers (IC) provide support for this program, awards pursuant to this funding opportunity are contingent upon the availability of funds and the submission of a sufficient number of meritorious applications. Applicants may request up to five years of support.</p> <p>NIH grants policies as described in the NIH Grants Policy Statement will apply to the applications submitted and awards made in response to this FOA.</p> <p>F&A costs requested by consortium participants are not included in the direct cost limitation. See NOT-OD-05-004, November 2, 2004.</p>

<p>LIMITACIONES A LA PARTICIPACIÓN</p>	<p>Foreign Organizations (Non-domestic (non-U.S.) Entity)</p> <p>NIH policies concerning grants to foreign (non-U.S.) organizations can be found in the NIH Grants Policy Statement at: http://grants.nih.gov/grants/policy/nihgps_2003/NIHGPS_Part12.htm#_Toc54600260.</p> <p>Applications from foreign organizations must:</p> <ul style="list-style-type: none"> ?? Request budgets in U.S. dollars. ?? Prepare detailed budgets for all applications (that is, complete the Research & Related Budget component of the SF424 (R&R) application forms – not the PHS398 Modular Budget component). See NOT-OD-06-096. ?? Charge back of customs and import fees is not allowed. ?? Format: Every effort should be made to comply with the format specifications, which are based upon a standard U.S. paper size of 8.5" x 11" within each PDF. ?? Funds for up to 8% administrative costs (excluding equipment) may be requested. See NOT-OD-01-028, March 29, 2001. ?? Organizations must comply with Federal/NIH policies on human subjects, animals, and biohazards. ?? Organizations must comply with Federal/NIH biosafety and biosecurity regulations. See Section VI.2, "Administrative and National Policy Requirements." <p>Proposed research should provide special opportunities for furthering research programs through the use of unusual talent, resources, populations, or environmental conditions in other countries that are not readily available in the United States or that augment existing U.S. resources.</p>
<p>ACCESO FORMULARIOS</p>	<p>Submitting an Application Electronically to the NIH</p> <p>To submit an application in response to this FOA, applicants should access this FOA via http://www.grants.gov/applicants/apply_for_grants.jsp and follow steps 1-4. Note: Applications must only be submitted electronically. PAPER APPLICATIONS WILL NOT BE ACCEPTED.</p>
<p>INFORMACIÓN PERSONALIZADA</p>	<p>We encourage your inquiries concerning this funding opportunity and welcome the opportunity to answer questions from potential applicants. Inquiries may fall into three areas: scientific/research, peer review, and financial or grants management issues:</p> <p>1. Scientific/Research Contact(s):</p> <p>Lillian Shum, Ph.D. Director, Mineralized Tissue and Salivary Gland Physiology Program Center for Integrative Biology and Infectious Diseases National Institute of Dental and Craniofacial Research 45 Center Drive Building 45, Room 4AN-18B Bethesda, MD 20892-6402 Telephone: (301) 594-0618 Fax: (301) 480-8319 Email: ShumL@nidcr.nih.gov</p> <p>William Sharrock, Ph.D. Director, Bone Biology Program Musculoskeletal Diseases Branch National Institute of Arthritis and Musculoskeletal and Skin Diseases One Democracy Plaza 6701 Democracy Boulevard, Suite 800, MSC 4872 Bethesda, MD 20872-4872 Telephone: (301) 594-5055 Fax: (301) 480-4543 Email: sharrockw@mail.nih.gov</p> <p>Roy Wu, Ph.D. Chief, Clinical Grants & Contracts Branch Cancer Therapy Evaluation Program Division of Cancer Treatment and Diagnosis National Cancer Institute 6130 Executive Boulevard, EPN Room 7009, MSC 7432 Bethesda, MD 20892-7432 (for U.S. Postal Service express or regular mail) Rockville, MD 20852 (for express/courier delivery) Telephone: (301) 496-8866 Fax: (301) 480-4663</p>

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LINK INFORMATIVO

<http://grants.nih.gov/grants/guide/pa-files/PA-07-132.html#SectionIII> PARA INFORMACIÓN GENERAL SOBRE LA CONVOCATORIA.