

Individual Career Development Award Mechanism

Summary of Research Career Development Award Mechanisms			
Program	Description	Sponsor (Mentor)	Reference Letters
K01	Mentored Research Scientist Development Award	Yes	Yes
K02	Independent Scientist Award	No	No
K05	Senior Scientist Award	No	No
K07	Academic Career Award	*	*
K08	Mentored Clinical Scientist Development Award	Yes	Yes
K18	Career Enhancement Award for Stem Cell Research	Yes	Yes
K22	Career Transition Award (see specific IC)	*	Yes
K23	K23 Mentored Patient-Oriented Research Career Development Award	Yes	Yes
K24	Mid-Career Investigator Award in Patient Oriented Research	No	No
K25	Mentored Quantitative Research Career Development Award	Yes	Yes
K26	Midcareer Investigator Award in Mouse Pathobiology Research	No	No

*Varies with career status and source of award. Check the program announcement (PA).

Letters of Reference

3 required

Letters are required for all new and revised mentored CDA applications (see table of [Career Development Award Mechanisms](#), Section B).

Applications with fewer than three reference letters may be delayed or may be returned without review. These letters should be from individuals not directly involved in the application, but who are familiar with your qualifications, training, and interests. **The sponsor/mentor of this application cannot be counted as a reference.**

The letters are critically important and should address the candidate's competence and potential to develop into an independent biomedical or behavioral investigator. Only those individuals who can make the most meaningful comments about the candidate's professional training and qualifications for a research career should be used as referees. Where possible, some referees who are not from the candidate's current department or organization, but are knowledgeable about their qualifications, should be selected.

Request reference letters only from individuals who will be able to return them to you in time for submission with the application. Complete the upper section of the **CDA Reference Guidelines Format Page** including the application submission deadline. Then send copies of the CDA Reference Guidelines Format Page to those who have agreed to serve as referees. Referees should be provided with postage-paid return envelopes *addressed to the candidate* with the following words in the front bottom left corner "DO NOT OPEN PHS USE ONLY." **Attach unopened envelopes to the Face Page of the original application and submit the entire package by the submission deadline. Applicants reapplying must include a new set of reference letters.**

Detailed Budget for Initial Budget Period

[FORM PAGE 4](#)

Form Page 4 is not required at the time of application. Should Form Page 4 be requested prior to award, specific instructions will be provided. If you are submitting an application to an agency other than NIH, be sure to read the instructions in the funding announcement to determine whether the application should be submitted in the modular format; or contact an appropriate official. (See [PHS Agency Contact Table](#).)

Budget for Entire Proposed Period of Support

[FORM PAGE 5](#)

Do not fill in the budget table on Form Page 5. Provide only the total direct costs requested for each year and total direct costs for the entire proposed period of support. **(Consult the relevant PA or RFA for guidelines on allowable costs and budget limitations.)** Begin the budget justification in the space provided; use continuation pages as needed.

Budget Justification

List the name, role on project, and percent effort for all project personnel (salaried or unsalaried) and provide a narrative justification for each person based on his/her role on the project and proposed level of effort. Identify all consultants by name and organizational affiliation, and describe the services to be performed. Provide a narrative justification for any major budget items, other than personnel, that are requested for the conduct of the project that would be considered unusual for the scope of research. **No specific costs for items or categories should be shown.**

Biographical Sketch

A biographical sketch (*limited to four pages for each person*) is required for the candidate, sponsor(s), co-sponsor(s), and **any other Key Personnel and Other Significant Contributors included on Form Page 2**. Biographical sketches should follow the order listed on Form Page 2. Sponsor(s), co-sponsor(s), and other Key Personnel should follow the Biographical Sketch Format Page. Candidates should follow the instructions below.

Education

Provide the month and year for each degree conferred. For non-degree education, indicate the time period covered. List professional certifications received within the last 10 years.

Research and/or Professional Experience

Use the headings given below instead of the instructions on the Biographical Sketch Format Page. Identify each heading.

Employment

Start with the first position held following the baccalaureate and give a consecutive record to date. Indicate the department and organization, department head or supervisor, rank, tenured or non-tenured, status (full- or part-time), and inclusive dates. Where applicable, include information on military service, internships, residencies, research assistantships, fellowships, etc.

Honors

List academic and professional honors chronologically.

Professional Societies

Identify professional societies and related organizations in which membership has been held within the last 10 years, giving dates.

Publications

List all publications (chronologically), divided into the following groups:

- Original research and theoretical treatises;
- Non-experimental articles, e.g., review of literature in field, book chapters, etc.;
- Books, pamphlets, etc.
- If the list of publications cannot be accommodated within the four-page limit, select the most pertinent publications. If a copy of a publication is being submitted with the application, indicate with an asterisk and footnote "copies sent." For competing continuation applications, also identify with a double asterisk and appropriate footnote all papers published during the concluding period of support.

Other Support Format page

For mentored CDAs (see [Summary of Award Mechanisms table](#)): Submit modified Other Support Page(s) for the sponsor(s) and co-sponsor(s), but not for the candidate. Provide information for the following selected items on the sponsor's and co-sponsor's current and pending research **support relevant to the candidate's research plan**.

INSTRUCTIONS FOR SELECTED ITEMS

Project Number: If applicable, include a code or identifier for the project.

Source: Identify the agency, institute, foundation, or other organization that is providing the support.

Major Goals: Provide a brief statement of the overall objectives of the project, subproject, or subcontract.

Dates of Approved/Proposed Project: Indicate the inclusive dates of the project as approved/proposed. For example, in the case of NIH support, provide the dates of the approved/proposed competitive segment.

Annual Direct Costs: In the case of an active project, provide the current year's direct cost budget. For a pending project, provide the proposed direct cost budget for the initial budget period.

Do not include information on overlap and level of effort.
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For non-mentored CDAs: Do not submit Other Support Pages at the time of application unless specified to do so in the corresponding career award announcement (e.g., [K24](#)). Updated information on all active support for the candidate, sponsor(s), co-sponsor(s), and Key Personnel may be requested by the awarding component prior to award.

Additional Information for Revised Applications

Use [CONTINUATION FORMAT PAGES](#) to complete the sections below.

Introduction to Revised Application (for revised applications only)

All revised applications must include an Introduction to Revised Application, **not to exceed three pages**.

List each area of concern noted in the Summary Statement for the previous application, and provide a detailed response to each concern. Summarize clearly the changes that have been made in the revised application. Do not include an extensive description of each change in the introduction. In the body of the application, highlight paragraphs with significant changes by bracketing, indenting, or changing the typography. If the changes are so extensive as to include most of the text, this exception should be explained in the Introduction to the Revised Application. Do not underline or shade changes.

Career Development Plan

Use [CONTINUATION FORMAT PAGES](#) to complete the sections below.

1. The Candidate

Candidate's Background

Use this section to provide any additional information not described in the Biographical Sketch Format Page such as research and/or clinical training experience.

Career Goals and Objectives: Scientific Biography

Describe your past scientific history, indicating how the award will fit into past and future research career development. If there are consistent themes or issues that have guided previous work, these should be made clear; if your work has changed direction, the reasons for the change should be indicated. It is important to justify the award and how it will enable you to develop or expand your research career.

Career Development/Training Activities During Award Period

Stress the new, enhanced research skills and knowledge you will acquire as a result of the proposed award. If you have considerable research experience in the same areas as the proposed research, reviewers may determine that the application lacks potential to enhance your research career. For mentored awards, describe structured activities, such as course work or technique workshops, which are part of the developmental plan.

Training in the Responsible Conduct of Research

All CDA applications must describe a plan to acquire (or provide) training in the responsible conduct of research. There are no specific curriculum or format requirements for this instruction; however, conflict of interest, responsible authorship,

policies for handling misconduct, policies regarding the use of human and animal subjects, data management, and data-sharing are areas that are strongly suggested for consideration. Applicants may wish to consult the NIH web site (<http://www.nih.gov/sigs/bioethics/researchethics.html>) for additional guidance. Briefly discuss each of the activities, except research, in which you expect to participate. Include a percentage of time involvement for each activity by year, and explain how the activity is interrelated with the proposed research and the career development plan.

2. Statements by Sponsor, Co-Sponsor(s), Consultant(s), and Contributor(s)

This section is to be completed by the sponsor, co-sponsor(s), consultant(s), and contributor(s), as appropriate.

For mentored awards (see [Summary of Career Development Award Mechanisms table](#)), the sponsor must explain how the award will enhance the development of the candidate's research career. Provide in detail the plan for the candidate's training and research career development. This description must include not only research, but also other developmental activities, such as seminars, scientific meetings, training in the responsible conduct of research, and presentations. It should discuss expectations for publications over the entire period of the proposed project.

The sponsor should explain the nature and extent of supervision and commitment to the candidate's development that will occur during the award period and the source or anticipated support for the candidate's research project for each year of the award period. The sponsor should describe previous experience as a mentor, including type of mentoring (e.g., graduate students, career development awardees, postdoctoral students), number of persons mentored, and career outcomes.

The sponsor should describe the candidate's anticipated teaching load for the period of the award (number and types of courses or seminars), clinical responsibilities, committee and administrative assignments, and the portion of time available for research. All mentored career development applications should identify all co-sponsors, consultants and collaborators involved with the proposed research and career development program. Briefly describe their roles and anticipated contributions that they will provide. A co-sponsor must specifically address the nature of his/her role in the career development plan and how the responsibility for the candidate's development is shared with the sponsor. Describe respective areas of expertise and how they will be combined to enhance the candidate's development. Describe previous experience as a mentor. Also describe the nature of any resources committed to this CDA. Letters from the sponsor, co-sponsor(s), consultant(s), and contributor(s) documenting their role and willingness to participate in the project must be included in this section of the application. Do not place these letters in the Appendix.

Non-mentored career development award applications should also list any contributors or consultants. Briefly describe research materials, data, guidance, or advice they will provide. **Letters** from consultant(s) and contributor(s), documenting their

willingness to participate in the project and describing their roles, **must be included in this section of the application as well.**

3. Environment and Institutional Commitment to the Candidate

Description of Institutional Environment

The sponsoring institution must document a strong, well-established research program related to the candidate's area of interest, including the names of key faculty members relevant to the candidate's proposed developmental plan. Referring to the resources description ([Resources Format Page](#)), indicate how the necessary facilities and other resources will be made available for career enhancement as well as the research proposed in this application. Describe opportunities for intellectual interactions with other investigators, including courses offered, journal clubs, seminars, and presentations.

Institutional Commitment to the Candidate's Research Career Development

Introduction

The institutional commitment should document the agreement of the institution to provide adequate time and support for the candidate to devote the proposed protected time to research and career development for the entire period of the proposed award. The institution should provide the equipment, facilities, and resources necessary for a structured career development experience. It is essential to document the institution's commitment to the retention, development, and advancement of the candidate during the period of the award.

Because of the diverse types of K awards, applicants should contact the appropriate awarding component program director listed in the specific PA or RFA to determine the level of commitment required for this application.

Agreement

The applicant organization must:

- a. Agree to release the candidate from other duties and activities to devote the required percentage of time for development of a research career. For most K awards, commitment of at least 75 percent of time is required. Describe actions that will be taken to ensure this; e.g., reduction of the candidate's teaching load, committee and administrative assignments, and clinical or other professional activities for the current academic year. Describe the candidate's academic appointment, bearing in mind that it must be full-time, and that the appointment (including all rights and privileges pertaining to full faculty status if in an academic setting) and the continuation of salary are not contingent upon the receipt of this award. Describe the proportion of time currently available for the candidate's research experience and what the candidate's institutional responsibilities will be if an award is made;
- b. Provide the candidate with appropriate office and laboratory space, equipment, and other resources and facilities (including access to clinical and/or other research populations) to carry out the proposed research plan; and

- c. Provide appropriate time and support for any proposed sponsor(s) and/or other staff consistent with the career development plan.

Signatures

The institutional commitment must be dated and signed by the person who is authorized to commit the institution to the agreements and assurances listed above. In most cases, this will be the dean or the chairman of the department. "Per" signatures are not acceptable.

The signature must appear over the signer's name and title at the end of the statement. If the candidate will be working away from the home institution, signatures from both the home and the host institution are required.

The sponsoring institution, through its signatures on the Face Page and in the institutional commitment section, certifies that all items outlined above will be provided and that the institution will abide by the applicable assurances and PHS policies.

4. Research Plan

A Research Plan is required for all types of individual K awards. The Research Plan is the major component of the research career development plan. It is important to relate the research to the candidate's scientific career goals. Describe how the research, coupled with other developmental activities, will provide the experience, knowledge, and skills necessary to launch and conduct an independent research career, or enhance an established research career.

For most types of research, the plan should include: a specific hypothesis; a list of the specific aims and objectives that will be used to examine the hypothesis; a description of the methods/approaches/techniques to be used in each aim; a discussion of possible problems and how they will be avoided; and, when appropriate, alternative approaches that might be tried if the initial approaches do not work.

The plan should be appropriate to develop skills needed by a researcher. Projects that lack a clearly stated aim or hypothesis, such as studies involving routine data gathering to see where leads might develop and other types of descriptive projects, usually do not receive favorable recommendations from peer reviewers. This also applies to projects that are overly ambitious and describe more work than can be done in the requested time, as well as more routine projects that might be done, in large part, by a skilled technician. Although candidates for mentored K awards are expected to write the Research Plan, the sponsor should review a draft of the plan and discuss it in detail with the candidate. Review by other knowledgeable colleagues is also helpful.

Follow the [research plan format and instructions](#) described in Section I, Item 7 of the main instructions, except as noted below.

The headings for the first four sections of the Research Plan are:

A. Specific Aims

B. Background and Significance

C. Preliminary Studies/Progress Report

D. Research Design and Methods

Note: The total number of pages for Item 1 (The Candidate) and A-D of Item 4 (Research Plan) combined may not exceed 25 pages. In many cases, CDA applications will be shorter than the limit.

Although it is understood that CDA applications do not require the extensive detail usually incorporated into regular research applications, a fundamentally sound Research Plan and a reasonably detailed methods section should be provided.

In general, less detail will be expected in descriptions of research planned for the future years of the proposed CDA, but there should be sufficient detail to enable the peer reviewers to determine that the plans for those years, including the methods to be used, are worthwhile and are likely to enhance development of the candidate.

E. Human Subjects Research

For Clinical Research, place the Target/Planned Enrollment Table(s) in section e.

F. Vertebrate Animals

G. Literature Cited

H. Consortium/Contractual Arrangements

I. Resource Sharing

J. Consultants

Omit this [section](#).