Hydrocephalus Association Mentored Young Investigator Award:
Policies and Guidelines

Executive Summary: The Hydrocephalus Association wishes to support young scientists and clinicians to build careers in hydrocephalus research. This award is designed to help insure that qualified scientists enter the field of hydrocephalus research and receive research training and experience under the guidance of highly trained, well-respected researchers who have demonstrated success in their field of research -with the goal that the young scientists become high-caliber, productive independent researchers with an enduring focus on research relevant to hydrocephalus. It is hoped that this support will help these young scientists to make successful applications for NIH K or R awards.

- This award provides support for up to two years at a level of up to $55,000 annually. All funds must be used to support the original awardee.
- Funding in year two is contingent on a report demonstrating that year one milestones, as laid out in the Research Plan portion of the grant application, have been met.
- The number of awards will depend on the quality of the applications received, available funds, and the research priorities determined by the Hydrocephalus Association in light of the hydrocephalus research landscape.
- We seek candidates who can demonstrate their intention and ability to continue in hydrocephalus research so that our investment is enduring. Special consideration will be given to candidates who have received their MD or PhD degree (or both) and are in post doctoral training or the first five years of their career in research or clinical practice. Candidates at the dissertation research stage of their doctoral training will also be considered if they show evidence of both high academic performance in the sciences and substantial interest and promise in areas of high priority for hydrocephalus research.
- Eligible organizations include institutions in North America; public or private institutions such as universities, colleges, hospital and laboratories; and for-profit and non-profit organizations.
- Candidates must have a qualified mentor who is competent and committed to providing active training and mentoring in the research for which the award is sought.
- The RFA is not intended to support the development of medical devices, instrumentation or other commercial applications.

Budget guidelines and restrictions include:
• Salary support request should be commensurate with level of education and experience and reflective of the percentage of the applicant’s time to be spent on this project.

• Supplementation of salary from other sources is allowable.

• Up to $15,000 per year may be requested for supplies, minor equipment, etc.

• Purchase of large equipment (>2,000) is not allowed.

• Indirect costs must be included within the $55,000/year maximum and may not exceed 10% of the total budget.

• No funds for travel should be requested in the budget. However, the HA will make additional travel awards of up to $1,500 for all awardees whose work supported by this project is accepted for presentation at a major international or national meeting related to hydrocephalus up to one year after the completion of the award period.

| Submission Information |

**Letter of Intent Deadline: April 30, 2010**

**Application Deadline: June 30, 2010**

Potential applicants must submit a letter of intent by April 30, 2010 describing the nature of the proposed project and its relationship to hydrocephalus, and identifying their mentor and institution. Completed applications, including letters of recommendation and institutional commitment, must be submitted in a single PDF document by June 30, 2010. Applicants will receive instructions on uploading applications, including letters of recommendation and the signed Face Page, to the HA secure server in response to their letters of intent.

Late applications will not be accepted and the deadline will not be waived.

| Letter of Intent Form Deadline: | April 30, 2010 |
| Application Submission Deadline: | June 30, 2010 |
| Administrative Review: | July 9, 2010 |
| Board Approval of Awards: | November 8, 2010 |

If, after reviewing these application instructions, assistance is needed in preparing the application, contact the HA Research Director:

Phone: 415-732-7040
Email: research@hydroassoc.org
Review and Award

A Review Committee of research scientists from both within and outside of the hydrocephalus research area will review the MYI applications. Each application will initially be assessed and scored by a primary and a secondary reviewer based upon the following criteria:

- Mentor and Training Environment (35%)
- Likelihood that the Proposed Project will Advance Hydrocephalus Treatment/Cure (25%)
- Scientific Merit of the Research Proposal (20%)
- Applicant Training and Career Potential (20%)

Based upon the assessment of applications by the Scientific Review Committee, the Research Committee of the Board of Directors will make a recommendation to the full Board of Directors for approval. The number of awards will depend on the quality of the applications received, available funds, and the research priorities determined by the Hydrocephalus Association in light of the hydrocephalus research landscape.

Instructions for Completing Specific Application Components

Format Specifications for all application components

- Type applications in black ink using a standard, readable font such as Arial, Helvetica, Palatino, Garamond or Times New Roman with a font size of 11 points or larger. Symbol fonts may be used to insert Greek letters or special characters. Smaller type size is acceptable in figures, graphs, charts, tables, figures, legends and footnotes, but these must be in black ink and readily legible.
- Use standard 8 ½ x 11 paper with at least half inch margins on all sides, a single column format, single-sided, single-spaced with consecutively numbered pages.
- Limit the Research Plan section of the application, including literature cited, to ten (10) pages.

Face Page

The Face Page includes the main identifying information for the application including applicant’s name and contact information, mentor’s name and contact information, institution name and address and title of application. Please use the Excel form provided. If it is necessary to recreate the form, please adhere to the original format and wording. Please include a scan of the completed face page as part of the single PDF file.

Abstracts

Please provide two abstracts describing the nature of this work and its importance to hydrocephalus:
one **Lay** Abstract to inform the non-scientific members of the Hydrocephalus Association and the lay public and one **Scientific** Abstract to inform the scientific community. Please limit each abstract to no more than 250 words.

### Research Mentor

Each applicant must identify a primary Mentor who is recognized as a scientist or physician with demonstrated experience in research and in training independent investigators, and who will provide guidance for the applicant's research development and the successful completion of the proposed research project. The primary Mentor must be committed to continue this involvement through the timeframe encompassed by this award. The applicant shall provide the name, title and contact information for the Mentor (and Co-Mentor, if any) in this section along with a brief description of why this Mentor (and any co-Mentor) has been selected.

The “Mentor Information” attachment is to be filled out and signed by the Mentor and returned to the applicant for submission with the application.

### Budget Summary, Detailed Budget and Budget Justification

Please complete the **Budget Summary** form as well as a Detailed Budget and Budget Justification for all years of support requested (maximum of two years). Please include the full cost of the proposed research project, how this award money will be used toward those costs, and how any additional money needed to complete the research will be obtained.

**Detailed Budget:**

- **Personnel** – designate the percentage of the applicant’s time devoted to research on this project. If the salary is supplemented by support from other agencies, the percent of salary requested must be equal to or less than the percent of time allotted to this project. Indicate dollar amounts separately for salary and benefits. If support is requested for a technician, identify the amount of time the technician will devote to the study. Explain other sources of funding for the salary and fringe benefits.
- **Equipment** – List all items of minor equipment requested and the cost of each item. If funds are requested for purchase equipment that is equivalent to items listed under Facilities Available, justify the duplication. Justify any item of equipment for which the need may not be obvious. Major equipment purchases of over $2,000 are not allowable.
- **Supplies** – includes items such as glassware, chemicals, animals, etc., in separate categories and give the estimated cost of each category. If animals are involved, state the number, unit purchase cost, and the unit care cost.
- **Other Expenses** – Itemize other expenses by major categories, such as duplication costs, publication costs, computer charges, equipment maintenance, etc.
- **Indirect Costs** – Indirect costs must be included within the $55,000/year maximum and may not exceed 10% of the total budget.
• No funds for travel should be requested in the budget. However, the HA will make additional travel awards of up to $1,500 to any awardees whose work supported by this project is accepted for presentation at a major international or national meeting related to hydrocephalus up to one year after the completion of the award period.

The maximum level of support available under this program is $55,000 per year and $110,000 for two years.

**Budget Justification:**

• Use this page to describe the nature of costs listed in the Detailed Budget under each major category (Personnel, Equipment, Supplies, Other)

**Biographical Sketches**

Complete a biographical sketch for all key personnel, beginning with the Applicant, the Mentor(s) and other key personnel. Use the format provided, or provide an NIH-style biosketch. If you use an NIH-style biosketch, please limit and identify references as requested in the HA format. HA defines “key project personnel” as anyone with an advanced degree who will play an instrumental role in the accomplishment of the training or project. Clearly identify the results of any previous hydrocephalus research highlighting prior publications relevant to the present application. Each complete Biographical Sketch should not exceed three (3) pages.

**Other Current Support**

Please describe all current funding that the applicant and Mentor receive and whether or not it is related to the research project proposed here. There is no page limitation for other support.

**Letters of Reference/Support**

Letters of reference/support must be submitted by the following:

• The research Mentor for the proposed project
• The Chair of the applicant’s department at the sponsoring institution
• At least two (2), and up to four (4) other individuals who are familiar with the candidate’s scientific interests and abilities, especially with respect to hydrocephalus-related research, including previous mentors.

These letters should discuss the applicant’s scientific and clinical abilities, interests, and potential and attest to the candidate’s academic qualifications, research experience, motivation, and commitment to hydrocephalus-related research. Letters from the Mentor and Department Chair should also clearly describe the institution’s commitment to the professional growth of the applicant.
In this section, the applicant should list the names and contact information (mailing address, email address and phone numbers) of the individuals who are submitting letters of recommendation. The letters should be collected by the Applicant and included with the full application in a single, non-protected PDF file.

**Previous Training and Experience and Future Plans**

The applicant must prepare a brief summary of his/her research and clinical fellowship training, clinical and research experience and future plans – including the reasons for entering fields related to hydrocephalus research. This section should present the applicant’s interest in and commitment to hydrocephalus research and care, and to pursuing a career in academic medicine or research. This section should be completed in conjunction with the mentor and should outline the general plan for supporting the applicant in hydrocephalus-related research and clearly indicate plans for introducing or mentoring the applicant in research study planning and design, statistical methods, data management, etc. This section must not exceed 5 pages.

**Research Plan**

This section is the opportunity to describe the Research Plan in sufficient detail to permit effective scientific review. The Research Plan for this award is limited in length to 10 pages, including the literature cited. Reviewers will look favorably on writing that is clear, concise, specific and informative.

A. **Specific Aims and Hypotheses.** State concisely and realistically what the research described in the application is intended to accomplish during the period of the grant, including the hypotheses to be tested or the need(s) to be fulfilled. *Do not exceed one page.*

B. **Background and Significance.** Briefly describe the background of the present proposal. Critically evaluate existing knowledge and specifically identify the gaps that the project is intended to fill. Concisely state the importance and rationale of this research by relating the specific aims to longer-term objectives. This section should also show the potential importance of the proposed work to hydrocephalus treatment and cure. If the aims of the application are achieved, state how scientific knowledge and clinical practice will be advanced.

C. **Preliminary Results.** If applicable, provide a detailed discussion of any preliminary results.

D. **Milestones.** Define at least two progress-related milestones that you expect will be completed by the end of one year and will indicate that the research project is proceeding in a timely and effective manner. These milestones are not expected outcomes of the research, but actions that will have been completed and documented which demonstrate effective progression of the research project. If funding is requested for two years, second year funding will be contingent on completion and documentation of these milestones.

E. **Research Design and Methods.** Provide a detailed discussion of the research design and methods
to be used to accomplish the specific aims. Discuss the data expected to be obtained and the means by which data will be collected, analyzed and interpreted. If clinical studies are involved, provide details of the methods for patient selection and care. If new methods, techniques, or procedures are to be used, explain their potential advantages over existing methodologies. Discuss potential difficulties and/or limitations of the proposed procedures and alternative approaches to achieve aims. Point out any procedures, situations or materials that may be hazardous to personnel or patients and the precautions to be exercised. Include a timeline for the project.

F. Responsible Conduct of Research. Applications must include a plan for obtaining instruction in the responsible conduct of research, including the rationale, subject matter, appropriateness, format, frequency and duration of instruction. The amount and nature of Mentor participation must be described.

G. Consultant or Collaboration Arrangements. If the proposed project includes consultant arrangements and/or collaboration with other individuals outside the applicant's group, describe the working relationships and support this description by letter(s) of intent signed by collaborating individual(s). If clinical material required by this grant is to be furnished by other individuals, include a statement from these individuals agreeing to their participation and precautions taken to ensure anonymity of patients.

H. Literature Cited. References should be numbered in the sequence that they appear in the text and listed at the end of the Research Plan. Each citation must include the names of authors, the name of the journal or book, volume number, page number and year of publication (titles are optional).

INSTITUTIONAL COMMITMENTS AND REQUIREMENTS

A signed letter from the appropriate sponsoring institutional official must accompany this application to verify that research conducted in accordance with this award has met the institutional requirements for the following:

1. An Institutional Review Board (IRB) has reviewed and approved the procedures for the use of human subjects, or human organs, tissues and body fluids, in the proposed research, in accordance with Department of Health and Human Services policies. Include the IRB number and a copy of the approved form with the letter, or indicate that the protocol is pending and will be approved before work is begun.
2. A DATA SAFETY MONITORING PLAN (DSMP) for any proposed study that places human subjects at more than minimal risk.
3. A plan to include, recruit and retain subjects from both genders, all racial and ethnic groups (and subgroups), and children as appropriate for the scientific goals of the research.
4. Research Involving Recombinant DNA meets the requirements contained in the document NIH Guidelines for Research Involving Recombinant DNA Molecules (revised April 2002).
5. Research Involving Animals meets the guidelines of the National Institutes of Health, U.S. Public Health Service, which require that all proposed studies be reviewed and approved by an Institutional Animal Care and Use Committee (IACUC). If applicable, please provide the federally
approved Animal Welfare Research Number, and the IACUC letter of approval, or indicate that the protocol is pending and will be approved before work is begun.

6. Adequate protection will be assured for any Biohazards involved in the research.

ADDITIONAL MATERIAL

If you feel that the following materials will be helpful to reviewers in assessing the worthiness of the application, the following may also be submitted with the application. These are not necessary to a complete application, but are allowable. Extensive appendix materials may not be reviewed, please include only the most relevant documents from the following list:

- Letters of Collaboration (if applicable).
- For research involving human subjects, a copy of the IRB application and patient consent forms.
- Other materials pertinent to the grant proposal, not already described.