SNS Neurosurgeon-Scientist Training Program (NSTP) Year 2 Application

Background and General Program Structure

The Society of Neurological Surgeons has established a two-year Neurosurgeon-Scientist Training Program (NSTP) to increase the pool of neurosurgery residents conducting research and to enhance their success rate in becoming independent neurosurgeon-scientists. Additional research by clinician-scientist neurosurgeons is critical to the fundamental discovery that advances new methods of care and new cures. The NSTP will serve as a formal mentored research program for those neurosurgery residents who are beginning a protected research year or who have already completed their protected research year. The primary goal of this new program is to provide participants with the skills, mentorship, education, and experience needed to successfully compete for individual research funding (e.g., NIH K award and R01 grants) and launch productive research careers. Awardees have access to neurosurgeon-scientist mentors through a national network organization and will participate in the Annual NINDS R25 workshop.

Applicants will submit a written application to the program and be interviewed at the AANS meeting by a selection committee. It is anticipated that up to 4-5 candidates per year will be selected based on the application process. Selected residents beginning their protected year of research in Year 1 of the NSTP program will be provided a travel stipend to attend the CNS and NINDS R25 Workshops in the fall and spring, respectively. All those selected for support in year 1 will be assigned a central NSTP mentor, who will work synergistically with the awardee's local mentor to guide the awardee. All awardees who complete year 1 of the program will be eligible to apply for funding to support continuation of their research project in the year after their year 1 support (i.e., year 2). Residents are eligible for continued support in year 2 whether they are continuing with protected research time or going back into clinical training full time. The key to obtaining research support in year 2 will be making good progress in their research during year 1, clear plans for use of the year 2 funding and a well-considered, specific plan to successfully use the year 2 funding to help transition to a K award application.

The request for proposals (RFP) will be launched in January 2023. Each year, applicant interviews for entry into year 1 will be completed during the annual AANS meeting in the spring and award winners will be annualed in May. Applicant interviews for entry into year 2 will be completed at the NINDS R25 meeting in the spring. The NSTP start date for both years 1 and 2 will be July 1.

- In 2023, applications will be accepted for Year 2 support from individuals who are in their protected research year between July 2022 and June 2023.
- For all submissions and any questions, please email Costas Hadjipanayis, MD, PhD, at hadjipanayiscg2@upmc.edu.
- Applications are currently being accepted with a focus on brain tumors, cerebrovascular, and functional disorders. Applications should include the following information. All information should be included in a single pdf file, in the order listed below, and uploaded to the SNS website here: https://www.societyns.org/nstp-application-year-2. Logging onto the SNS website is required to gain access to the submission page. If you do not have an account on the SNS website, create the "Create An Account" button on the log-in page.

YEAR 2 APPLICATION INFORMATION (2023)

• **Application Due:** March 1, 2023

• Candidate Interviews: NINDS R25 meeting, Spring 2023

• Notification of Awardees: May 2023

• Start Date in NSTP program: July 1, 2023

- Applications will only be considered for those who will have started a protected year of research in July 2022 and completed a 12-month protected year of research by July 1, 2023
- Awards will consist of up to \$50,000 for well-justified research costs associated with continuing a research project towards the anticipated submission of an NIH K or R01 award during their first faculty year.
 - 5-page application, written by resident, consisting of research plan, training plan, plan to get to an NIH K award (includes timing of entire research activity /clinical activity from application date to end of residency) and the general expectation for the K research project, and how the proposed research will lead to the anticipated K award project.
 - First 4 pages must include a description of the progress made on the research project during residency prior to submission of the application, specific aims, background/significance, research plan for each specific aim that includes: methods, statistical approach, expected results, pitfalls/alternatives, plan to minimize experimental and analytical bias and how the proposed research will lead to an NIH K or R01-equivalent award. Bibliography page is not included in the 4-page limit.
 - The final page should describe a gap-based career development plan (includes mentorship plan, institutional support, and plan for a K award that incorporates timing of research/clinical activity)
 - References: Maximum of 3 from those who are familiar with the research conducted during residency by the applicant.
 - Candidate Biosketch
 - Biosketch for each mentor: should include a personal statement specifically relevant to this application.
 - Mentor(s) letter: One letter from all mentors should describe the mentoring/training plan, how the mentor intends to help the candidate get to a K award, description of ownership of project by candidate, description of intellectual contribution of candidate to project. The mentor cannot simply have the candidate working on an on-going project that cannot be turned into an original project by the candidate to apply for a K award. If the proposed project did originate with the mentor, a clear description of how this project will lead to a K award project fully owned by the candidate must be clearly explained.
 - Mentor(s) roles and qualifications description document
 - Chair letter that describes the institutional commitment to the candidate and the plan for oversight to ensure that the candidate makes excellent progress on the research project in year 2. This is especially critical for candidates who will be spending limited time doing research due to clinical training demands.

Application Process: Applications are currently being accepted with a focus on brain tumors, cerebrovascular, and functional disorders. All information should be included in a single pdf file, in the order listed above, and uploaded on the SNS website here: https://www.societyns.org/nstp-application-year-2. Logging onto the SNS website is required to gain access to the submission page. If you do not have an account on the SNS website, create the "Create An Account" button on the log-in page.

NSTP Highlights:

- Start date in NSTP program is July 2023.
- An NSTP core review committee will review applications, interview candidates, and make selection decisions.
- All awardees will work with both their local mentor and a central mentor associated with the NSTP program
- Year 2 selection interviews will be completed at the NINDS R25 Workshop
- Year 2 funding (up to \$50K) will be provided via a competitive application process. Selection into Year 2
 of the NSTP program, and research funds provided, will be determined via evaluation of a written
 application and interview process in the spring of Year 1 at the NINDS R25 Workshop.
- For those applicants who are completing a protected year of research at the time of application, they will be eligible to enroll into the NSTP for 1 year with funding.

