

Marlene and Paolo Fresco Movement Disorder Fellowship Request for Applications (RFA)

The Marlene & Paolo Fresco Institute Clinical Movement Disorders Fellowship program is now open for applications. This fellowship program is accepting applications on a rolling basis with applicants evaluated upon submission and qualified applicants receiving awards until the positions are filled. Successful applicants will be able to start the fellowship on or after June 1, 2021 and will receive support for clinical and research training at the Marlene and Paolo Fresco Institute for Parkinson's and Movement Disorders at New York University Langone Health (NYULH).

Successful applicants will participate in the international fellowship program between NYULH and a funded partner institution in Italy. The fellowship includes two years of support for training, with the first year at NYULH and the second at a partner institution (nominated by the applicant) in Italy or in a European country. Fellows completing the program may be eligible for further support through competitive grant opportunities offered by the Fresco Parkinson Institute in Italy.

This program is designed to support talented and motivated Italian citizens who have completed an M.D. degree and a four-year residency program in Neurology, Physical Medicine and Rehabilitation, Neurophysiopathology, Geriatrics or related specialties.

Successful candidates will benefit from state-of-the-art research facilities at NYU as well as from the extensive and thriving clinical-research community in New York City. Marlene & Paolo Fresco Institute Clinical Fellows will enjoy competitive salaries and benefits. The accepted fellow will receive a salary commensurate with standard compensation and taxation levels between the two countries.

Application documentation to be submitted:

1. CV (NYU format)
2. A one-page cover letter including a summary of the candidate's:
 - History and commitment to a clinical or research career in Movement Disorders
 - Potential to develop a successful career in Movement Disorders
 - Expectations about the training to be obtained with this fellowship
3. The application must include letters of references from at least two previous or current mentors (up to four mentors) that include their respective qualifications and previous experience.
4. A copy of all degree certificate(s) with grades and clinical licensure(s)
5. Information about the center that will host you (description of the center's overall structure and programs, ongoing research projects, mentor's CV, etc.).
6. A one-page description of research interests/possible research proposal.

7. Evidence of English language proficiency, as determined by one of the following:

- TOEFL score of at least 65 or IELTS score of at least 5.5 (completed within five years at the time of application submission)
- Signed documentation from an academic institution or English language school
- If none of the above documents are available, English language proficiency will be determined during an interview conducted by the sponsor either in-person, by videoconferencing, or by telephone

Prospective applicants should send the application documentation to FI-NRP@nyumc.org or Monica.Norcini@nyulangone.org and cc: Luis.Duarte@nyulangone.org by March 15, 2021 in order to start on June 1, 2021 or after. Applicants should offer a preferred start date for their fellowship; however, the Marlene & Paolo Fresco Institute reserves the right to offer alternative start dates with the goal of identifying a mutually-acceptable start date for the fellowship. For any questions, please contact Dr. Monica Norcini.

The first year of the fellowship will be at the Marlene & Paolo Fresco Institute for Parkinson's and Movement Disorders at New York University School of Medicine and NYU Langone Health. The second year of the fellowship will be a supported clinical and scientific immersion fellowship at an Italian institute or university proposed by the applicant.

Movement Disorder Fellowship

Marlene and Paolo Fresco Institute for Parkinson's and Movement Disorders

Department of Neurology
NYU School of Medicine
NYU Langone Health

Program Director: Christine Stahl, M.D.

Program Manager: Monica Norcini, Pharm.D, Ph.D

One-year fellowship at NYULH, non-ACGME-accredited

One-year fellowship in Italy

BACKGROUND:

The Fresco Institute (FI) for Parkinson's and Movement disorders in the Department of Neurology at NYU Langone Health administers a non-ACGME-accredited training program in Movement Disorders. The one-year program provides fellows with focused training that involves developing expertise in several specialties including: phenomenologically classifying movement disorders; neuroanatomy, pathophysiology, basic science and molecular biology, neuroepidemiology, and neuroimaging, as well as applying neuropharmacology and advanced therapeutic interventions (e.g., deep brain stimulation and botulinum toxin injections).

PROGRAM ADMINISTRATION:

Duration of Training in NYULH: 1 year

Prerequisites for training: Successful completion of a clinical residency in neurology or related specialties in Italy.

Responsibilities of Program and Program Director to the Fellow

- The program will provide a supportive work environment, office space, and resources to conduct clinical and research training
- The program will provide salary support and benefits consistent with PGY training level.
- The director and faculty will provide appropriate supervision for all clinical activities

- The director will support the fellow in the successful completion of research project(s), and preparation for presentation/publication
- The director will provide assistance to the fellow in identifying employment opportunities
- The director will provide timely evaluations to fellow

CLINICAL TRAINING:

Objective of the curriculum is to develop expertise in diagnosing, treating, and managing patients with movement disorders. We provide comprehensive exposure to the following specialties within the Movement Disorders as recommended by the American Academy of Neurology (AAN):

- Clinical neurology: adult and pediatric movement disorders (Refer to Appendix A)
- Psychiatry for interface of movement disorders in primary psychiatric conditions, drug-induced movement disorders, and psychogenic movement disorders
- Neuroimaging: MR, CT, PET patterns in movement disorders
- Neuroepidemiology: epidemiological issues relative to movement disorders and clinical trial design
- Molecular biology, neuropharmacology, neurochemistry, and neurophysiology:
- Neurosurgery in the context of interventions for movement disorders
- Neurological education: teaching experience for physicians, health professionals, patients, and the public in movement disorders
- Neurorehabilitation

Clinical Learning Objectives

The fellow will see patients with a variety of movement disorders at the Fresco Institute for six half-day sessions per week. All patients seen by the Fellow will also be examined by a supervising movement disorders attending. The Fellow will be responsible for answering calls from patients they saw and to only make recommendation(s) under the supervision of an attending physician.

The fellow will also see patients at the NYULH Center for Neuromodulation where they will be trained in the assessment of candidates for deep brain stimulation (DBS) for the treatment of a variety of movement disorders. The fellow will discuss all the programming changes with the attending. By the end of the fellowship, the fellow should be very familiar with the post-operative management and long-term programming of the stimulators. There will be ample opportunity to observe in the operating room and learn the basics of intra-operative monitoring if interested.

Research training

Fellows will have four half-day sessions per week dedicated to their research project. Additionally, fellows may be asked by faculty to assist with preparing case reports, case series, and review articles for publication. Timely completions of such projects are expected provided ample time has been provided.

Other Expected Goals:

- Submit an abstract (s) to at least one national or international conference during their fellowship.
- Review the "Essentials of Clinical Research" from Glasser et al., available in the NYULH virtual library and present chapters during the monthly journal club.
- Participate in the biannual International Fresco Symposium and present any ongoing research or clinical projects.

The Clinical Staff

The following staff will provide clinical training for the fellow:

- Steven J. Frucht, M.D.
- Andrew Feigin, M.D.
- Un Jung Kang, M.D.
- Christine Stahl, M.D.
- Patrick Drummond, M.D.
- Claire Miller, MD, PhD
- Lin Pang, M.D.

EDUCATION:

The staff at the Fresco Institute places a high value on continuing education in order to optimize the care that can be delivered to patients. To that end, the following items have been instituted to help address this goal and will be applicable to the fellow as well.

- The fellow will be sponsored to attend at least one meeting per year and is strongly encouraged to attend the annual meetings of the American Academy of Neurology or the International Congress of the Society for Movement Disorders.
- The fellow will be sponsored to attend any meeting at which they are presenting, if funding is available.
- The fellow will join the Fresco Institute clinical team for weekly meetings.
- The fellow will join the Fresco Institute research team for weekly meetings to monitor and review research projects.

The fellow will be expected to attend the following **teaching conferences**:

- **Weekly video rounds** occur every Tuesday from 5PM – 6PM. Hosted by Dr. Frucht, interesting video case vignettes will be presented by the fellows from the previous week's patient encounters. Review of phenomenology, differential diagnoses, and treatment approaches will be discussed in an open forum with movement disorder's faculty, residents, fellows, and students.
- **Journal Club and Basic Principles of Research Monthly Sessions**
Monthly meetings will take place to revise and critically discuss written materials provided in advance. This modality will include a journal club and Basic Principles of Research. For the Journal Club, pivotal and seminal paper publications in high impact journals will be studied and presented by the Fellows. Journal club is expected to help build and solidify confidence in fellows' skills to critically evaluate the medical literature.

Basic Principles of Research will also include written educational material and will cover introduction to clinical research methods and ethical conduct of research.

Pre-specified deliverables: fellows are required to complete the Collaborative Institutional Training Initiative (CITI) tutorial in human subject research. Fellows are also expected to effectively contribute to their research group's projects to warrant a lead author abstract submission to a regional/national meeting.

Optional deliverables: to reinforce knowledge in their field of study or interest, fellows are encouraged to write a curated literature review paper, abstract for an international meeting, and/or prepare an original manuscript for publication.

Incorporating research experiences and additional research methods coursework into the fellowship will encourage fellows to explore and define their interest in clinical/translational research while building their skills and enhancing their confidence.

Core competencies

Patient Care:

The fellow will demonstrate competency in:

- Obtaining an accurate and comprehensive history in patients with Parkinson's disease or other movement disorders
- Performing the movement disorder examinations
- Understanding the differential diagnosis, laboratory and imaging investigations, and management of Parkinson's disease and other movement disorders
- Determining the appropriate candidates with Parkinson's disease, tremor and dystonia, for deep brain stimulation
- Understanding the basic principles of the Parkinson's disease's rehabilitation
- Developing and implementing independent clinical plans for patients with Parkinson's disease and other movement disorders

Clinical Evaluation of Movement Disorders (adapted from AAN guidelines)

- Recognize and document patterns of clinical findings in movement disorders when the patient is at rest
- Perform a complete general neurological examination
- Perform a focused examination for movement disorders including turning, rest, assuming a posture, performing a task
- Recognize and document patterns of clinical findings in movement disorders when the patient maintains a posture
- Recognize and document patterns of clinical findings in movement disorders when the patient executes a task
- Evaluate tone, gait,
- Familiarity and ability to apply standardized rating scales for movement disorders
- Recognize and document non-neurological findings typical of movement disorders
- Utilizing the Unified Parkinson's Disease Rating Scale (UPDRS) and other relevant movement disorders scales

Practice Based Learning and Improvement

The fellow will:

- Research pertinent literature on interesting cases
- Present cases of educational value at weekly video rounds
- Participate in clinical, research, and educational conferences of the Fresco Institute
- Prepare lectures that will be presented to neurology residents on specific topics in movement disorders
- Prepare lecture(s) for medical students
- Write consultation letters and other notes as needed in the electronic medical record
- Familiarize him/her with the scope of FI research activities and make appropriate referrals for studies
- Present Parkinson's related information to patient groups

Professionalism

The fellow will:

- Demonstrate respect for patients and all center personnel
- Respond to communication from patients and health professionals in a timely manner
- Order and follow-up on appropriate laboratory and diagnostic tests in a timely manner
- Document the patient's course in the medical records in a timely fashion
- Demonstrate ethical behavior, integrity, honesty, compassion, and confidentiality in the delivery of care

Interpersonal and Communication Skills

The fellow will:

- Collaborate effectively with physicians, nurses, social workers, and administrators
- Communicate effectively with referring physicians
- Interact professionally and compassionately with patients

Monitoring of Fellow

Formal evaluations will occur every six months following direct observations of the fellow and discussions with other teaching staff involved in the fellowship

Review of the faculty evaluations will be conducted one-on-one between each fellow and Drs. Feigin and Frucht to reaffirm basic knowledge, patient management skills, understanding of research methodology and the academic process of writing for peer-reviewed journals, lecturing and teaching. Evaluations will be reviewed by faculty and the trainee. A permanent record of the evaluation will be accessible to the trainee and authorized personnel.

Fellows will be given the opportunity to review the program and faculty through New Innovations on a semi-annual basis. This feedback will be shared with faculty in an effort to promote transparency and ongoing programmatic growth.

APPENDIX A

Hypokinetic Movement Disorders

- Parkinson's Disease
- Parkinsonism-plus syndromes
- Multiple system atrophy, Progressive supranuclear palsy, Cortico-basal
- Degeneration, Lewy body dementia
- Stiff person syndrome

Hyperkinetic Movement Disorders

- Huntington's disease
- Other forms of chorea
- Sydenham's chorea, Chorea gravidarum, Lupus chorea, Tardive dyskinesia
- Primary dystonia
- Secondary forms of dystonia
- Hallervorden-Spatz disease
- Gilles de la Tourette syndrome
- Other primary tic disorders
- Secondary tic disorders
- Stereotypies seen in primary psychiatric illnesses
- Stereotypies seen in neurological conditions
- Painful legs/moving toes
- Action and non-rest tremors
- Essential or familial tremor
- Physiological tremor
- Drug-induced tremors, and tremors of metabolic and medical illnesses
- Rubral tremor
- Tremors seen in cerebellar disorders
- Wilson's disease
- Hemifacial spasm
- Essential Myoclonus
- Secondary myoclonus
- Startle syndromes
- Gait disorders
- Spinal cerebellar ataxias
- Forms of ataxias
- Paroxysmal dyskinesias
- Restless leg syndrome
- Akathisia
- Tardive syndromes