

Academic and Industry Physician Workforce Development in Experimental Neurotherapeutics



Ludy C. Shih^{1,2} and Dietrich Haubenberger^{3,4}



Boston University School of Medicine¹, Boston Medical Center², University of California, San Diego³, and Neurocrine Biosciences⁴

INTRODUCTION

There is currently no standard method by which physicians-in-training (e.g., medical students, residents, or fellows) are introduced to clinical research careers in neurotherapeutics.

As such, decisions to embark upon a clinical research career in industry are based on very little first-hand exposure to “on-the-job training.”

Traditional research training paths, such as MD-PhD or Medical Scientist Training Program (MSTP), typically do not focus on clinical trial/study design or principles of therapeutics development.

The main objectives were to:

1. Identify the needs for trained clinician-investigators in both academia and industry
2. Identify existing academic, academic-industry, and government-sponsored fellowships for post-residency fellows
3. Highlight difficulties of early career neurologists in finding relevant training opportunities

METHODS

Literature review and interviews with current fellows and early career faculty neurologists exploring a clinical research career in industry or academia

REFERENCES

1. Deplanque et al. *Therapie* 2020; 75:93-100.
2. Sweiti et al. *Drug Discov Today* 2019; 24:1865-70.
3. Lahiry and Gattu. *Pharmaceut Med* 2020; 34:175-84.

Options for Post-Residency Neurotherapeutics Fellowships (2 yrs)

Academic

University of Rochester Experimental Therapeutics T32 Fellowship

Academic-Industry

MGH-Biogen
MGH-Takeda
MGH-Pfizer

Government

NIH-FDA Fellowship in Clinical Trial Methodology and Regulatory Science

U of Rochester T32: <https://bit.ly/2Nd8tT3>
*MGH-Biogen fellowship: <https://bit.ly/3pnODS8>
MGH-Takeda fellowship: <https://bit.ly/3api2ac>
Pfizer PflRe-MGH fellowship: <https://bit.ly/2Ny1xlG>
NIH-FDA fellowship: <https://bit.ly/3aIVzLi>

*MGH, Massachusetts General Hospital

Please contact lshih@bu.edu for electronic copies of the poster

RESULTS

Physicians' perspectives are necessary for determining unmet health needs for a given patient population¹ and therefore, decision-making regarding the development of a specific therapeutic agent.

Physician expertise is needed for various specific functions relevant to testing and developing the therapeutic in a clinical population^{1,2}

Program	Duration	Academic time	App deadline
U of R T32	2 yrs	100%	Rolling
MGH-Biogen	2 yrs	50%	Nov 1
MGH-Takeda	2 yrs	50%	Nov 1
MGH-Pfizer	2 yrs	25%	Nov 1
NIH-FDA	2 yrs	--	Rolling

Difficulties facing fellows and early career neurologists include deciding what is the optimal time spent in practice before joining industry², finding appropriate programs with on-the-job exposure, and visualizing the long-term career path.

DISCUSSION

A mentoring and education committee through a professional society, such as ASENT, with outreach to neurology residents and residency programs may help improve awareness of these training and career paths.

ACKNOWLEDGEMENTS

Thanks to Carol Qian & Lauren Reoma for review and comments on the abstract & poster