



Perioperative Outcomes Research Fellowship – Twelve Years of Experience

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INTRODUCTION

The **Perioperative Research Fellowship** at the Department of Anesthesiology, Critical Care and Pain Medicine at Hospital for Special Surgery (HSS) in New York was established in 2012.

The fellowship offers a one-to two-year curriculum, exposing fellows to clinical and analytical projects, particularly in perioperative outcomes research, regional anesthesia, and data analysis.

The purpose of this study is to **reevaluate the program's success after 12 years of operation**, focusing on the research fellows' academic and career achievements and engagement in life-long learning.

METHODS

We analyzed **publication and presentation activity** by fellows over 12 years utilizing the Clarivate Web of Science database and program content of annual meetings of the following professional organizations: ASRA and Pain Medicine, ESRA and Pain Medicine, IARS and ASA.

Measures such as **first- and co-authored publications** in peer-reviewed journals **and abstract presentations** were recorded, as well as **citations and impact of their research**. Using the Jefferson Scale of Physician Life Long Learning, we assessed satisfaction, academic success, and career development after participating in the fellowship.

Table 1. Publication characteristics of Perioperative Research Fellows 2012 – 2024 at Hospital for Special Surgery

	Number of publications during fellowship (first year only)	Number of publications total	Top affiliations	Top journals published	Year with the most publications	H-index (as of December 24)	First authorship publications	Abstracts
Fellow 1	12	55	Weill Cornell Medicine (11) Cornell University (10) Paracelsus Medical University (4)	Regional Anesthesia and Pain Medicine (12) British Journal of Anaesthesia (6) Anesthesiology (4)	2014	15	16	14
Fellow 2	13	25	Paracelsus Medical University (7) Weill Cornell Medicine (7) Cornell University (6)	Regional Anesthesia and Pain Medicine (4) WIENER KLINISCHE WOHENSCHRIFT (3) Anesthesia and Analgesia (2) NOTFALL & RETTUNGSMEDIZIN (2) Journal of Arthroplasty (2) European Journal of Anaesthesiology (2)	2014	14	7	4
Fellow 3	7	17	Weill Cornell Medicine (4) Paracelsus Medical University (4) Cornell University (4)	Anesthesia and Analgesia (3) Pain Management (2) Regional Anesthesia and Pain Medicine (2) British Medical Journal (2) Anaesthesist (2)	2015/2016	12	6	1
Fellow 4	7	67	Paracelsus Medical University (7) Weill Cornell Medicine (6) Cornell University (5)	Anesthesia and Analgesia (12) Regional Anesthesia and Pain Medicine (12) British Journal of Anaesthesia (11)	2018	13	15	20
Fellow 5	12	13	Weill Cornell Medicine (12) Cornell University (12) Paracelsus Medical University (11)	Regional Anesthesia and Pain Medicine (2) Pain (2) Anesthesiology (2) Anesthesia and Analgesia (2)	2018	10	3	8
Fellow 6	13	15	Weill Cornell Medicine (13) Icahn School of Medicine at Mount Sinai (13) Cornell University (13)	Spine (4) British Journal of Anaesthesia (3) Regional Anesthesia and Pain Medicine (3)	2020	11	3	2
Fellow 7	6	8	Paracelsus Medical University (5) Icahn School of Medicine at Mount Sinai (5) Weill Cornell Medicine (4)	Regional Anesthesia and Pain Medicine (4) British Journal of Anaesthesia (2) Anesthesia and Analgesia (1) Anesthesiology (1)	2019	5	4	1

RESULTS

Seven fellows completed the program between **2012 and 2024**, with one fellow currently enrolled.

Fellows contributed to **>200 publications**, with **76** of those papers having the fellow as the **first author**.

The **total number** of publications ranged from **8 to 67** over the observational period.

First-year publication - **6 to 13** publications per person.

Fellows presented **51 scientific abstracts** at a variety of conferences. Overall the **fellows presented 1-8 abstracts at renowned conferences** during their fellowship term with numerous awards received.

The **research impact** of fellows varied significantly, as reflected in their h-indices as of December 2024 ranging from **5 – 15 points**.

In their self-assessments utilizing the Jefferson Scale of Physicians Life Long Learning, most of the fellows indicated a **high level of professional and academic development**, reflected by their continued research involvement, as well as engagement and importance of lifelong learning and staying updated in health science.

DISCUSSION

Research fellowships are crucial due to their ability to provide healthcare professionals with the skills to develop evidence-based strategies that may reduce complications, enhance recovery protocols, and optimize patient safety during the perioperative period.

Extending our colleagues evaluation of the Perioperative Outcome Research Fellowship at HSS, showed enduring significant impact on fellows’ academic output and overall institutional publishing performance.

The success of the Perioperative Research Fellowship at Hospital for Special Surgery, over the past 12 years, demonstrates the importance of structured research training. The program has yielded highly productive researchers who continue to make significant contributions to the field of perioperative outcomes research.



Abstract and References