2020-2021 Accreditation Annual Report

UNITED COUNCIL FOR NEUROLOGIC SUBSPECIALTIES

Prepared By:

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United Council for Neurologic Subspecialties

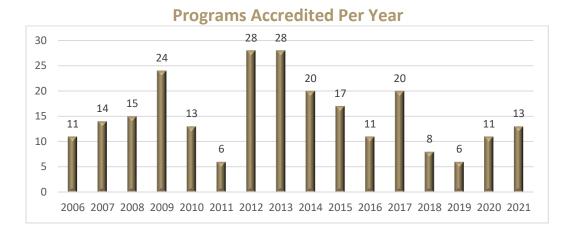
March 2022

INTRODUCTION

Every fall, data gathered from training program annual reports, accreditation applications, annual fellowship surveys, and program director surveys (as they occur) are provided to the Accreditation Council, program directors, and Board of Directors. These tools are used by UCNS to continuously evaluate the state of its recognized subspecialties, accredited programs, and specifically by the Accreditation Council to set and evaluate accreditation outcomes. During the review, the Accreditation Council assesses its current processes to determine whether adjustments are necessary to improve programs' accreditation experiences. The data presented in this report is through the spring accreditation cycle, June 1, 2021, unless otherwise noted, for the subspecialties of Autonomic Disorders (AD), Behavioral Neurology & Neuropsychiatry (BNNP), Clinical Neuromuscular Pathology (CNMP), Geriatric Neurology (GN), Headache Medicine (HM), Neurocritical Care (NCC), Neuroimaging (NI), and Neuro-oncology (NO).

PROGRAM GROWTH AND ATTRITION

As of December 1, 2021, 223 programs are accredited in eight subspecialties representing 37 states, the District of Columbia, and two Canadian provinces. UCNS-accredited programs are present at a majority of medical institutions with ACGME-accredited neurology residencies, and 172 of the 218 programs are located within neurology departments. Program leadership (program directors and department chairs) are predominantly neurology based (85% and 79% respectively), with a specific breakdown included in the subspecialty-specific section later in this report. The total number of programs accredited per year is shown in the chart below.



Despite continued growth in the number of accredited programs, attrition has occurred for a variety of reasons, most often due to loss of key program leadership or the inability to secure or maintain institutional support or funding. Since 2006, UCNS has accredited 245 programs in nine subspecialties and as of June 1, 2021, UCNS has lost 22 programs to attrition for a 91% overall retention rate. This attrition includes the now sunset subspecialty of Neural Repair and Rehabilitation (NRR), which ceased supporting accreditation in 2019.

GROWTH PER YEAR PER SUBSPECIALTY

The number of programs accredited per year per subspecialty varies, starting with BNNP in 2006 through the newest subspecialty with accreditation available, CNMP, in 2013. The table below illustrates the growth per year, per subspecialty, without attrition.

| Year | AD | BNNP | CNMP | GN | НМ | NCC | NRR^ | NI | NO | Total |
|-------|----|------|------|----|----|-----|------|----|----|-------|
| 2006 | | 11 | | | 0 | | | | | 11 |
| 2007 | | 5 | | | 9 | | | | | 14 |
| 2008 | | 1 | | | 2 | 9 | | 0 | 3 | 15 |
| 2009 | | 1 | | 0 | 1 | 16 | 0 | 2 | 4 | 24 |
| 2010 | 0 | 1 | | 1 | 0 | 8 | 0 | 1 | 2 | 13 |
| 2011 | 0 | 0 | | 0 | 3 | 2 | 0 | 1 | 0 | 6 |
| 2012 | 1 | 4 | 0 | 1 | 8 | 10 | 0 | 0 | 4 | 28 |
| 2013 | 2 | 4 | 6 | 1 | 4 | 4 | 1 | 0 | 6 | 28 |
| 2014 | 2 | 5 | 0 | 2 | 3 | 3 | 0 | 0 | 5 | 20 |
| 2015 | 0 | 3 | 0 | 0 | 5 | 4 | 1 | 1 | 3 | 17 |
| 2016 | 1 | 2 | 0 | 0 | 1 | 5 | 0 | 1 | 1 | 11 |
| 2017 | 0 | 0 | 0 | 2 | 7 | 7 | 0 | 0 | 4 | 20 |
| 2018 | 0 | 1 | 0 | 0 | 3 | 1 | 0 | 0 | 3 | 8 |
| 2019 | 0 | 2 | 0 | 0 | 2 | 1 | | 0 | 1 | 6 |
| 2020 | 1 | 2 | 0 | 0 | 3 | 4 | | 0 | 1 | 11 |
| 2021 | 0 | 7 | 0 | 0 | 2 | 3 | | 0 | 1 | 13 |
| Total | 7 | 49 | 6 | 7 | 53 | 77 | 2 | 6 | 38 | 245 |

Accredited Programs by Year Per Subspecialty

^NRR subspecialty sunset in 2019

The following chart shows the number of programs accredited per subspecialty and the number lost to attrition.

| Accieuteu | Accredited Programs Per Subspecialty with Attrition | | | | | | | |
|--------------|-----------------------------------------------------|------|-------------------------|--|--|--|--|--|
| Subspecialty | Accredited | Lost | Cumulative Total | | | | | |
| AD | 7 | 2 | 5 | | | | | |
| BNNP | 49 | 5 | 44 | | | | | |
| CNMP | 6 | 0 | 6 | | | | | |
| GN | 7 | 3 | 4 | | | | | |
| НМ | 53 | 6 | 47 | | | | | |
| NCC | 77 | 1 | 76 | | | | | |
| NI | 6 | 2 | 4 | | | | | |
| NO | 38 | 1 | 37 | | | | | |
| NRR | 2 | 2 | 0 | | | | | |
| Total | 245 | 22 | 223 | | | | | |

Accredited Programs Per Subspecialty with Attrition

From 2016 through 2020, UCNS can look at the trend in program growth among the subspecialties. The table below illustrates that more than half of the subspecialties saw an overall growth in the number of programs from 2016 to 2020, ranging from one program to twelve over the five-year period. One subspecialty saw an overall loss and two subspecialties remained stagnant.

| | | | | | | Five-Year Change |
|--------------|------|------|------|------|------|------------------|
| Subspecialty | 2016 | 2017 | 2018 | 2019 | 2020 | # |
| AD | 5 | 5 | 5 | 4 | 5 | 0 |
| BNNP | 34 | 34 | 35 | 37 | 37 | 3 |
| CNMP | 6 | 6 | 6 | 6 | 6 | 0 |
| GN | 3 | 5 | 5 | 4 | 4 | 1 |
| HM | 34 | 39 | 42 | 43 | 45 | 12 |
| NCC | 61 | 68 | 69 | 69 | 73 | 12 |
| NI | 5 | 5 | 5 | 4 | 4 | -1 |
| NO | 27 | 31 | 34 | 35 | 36 | 9 |

Five-Year Accreditation Growth Trend for Accredited Programs (Total programs by subspecialty by year)

FELLOWS

Since 2006, 1,572 physicians have filled 3,595 first-year fellowship spots and have graduated from the current UCNS-accredited programs through 2020. A table illustrating the program graduates by subspecialty by year is included later in the report, with more specific information given in the subspecialty-specific portion of the report. The largest number of fellows have graduated from NCC (746) followed by HM (247), BNNP (245), NO (224), CNMP (60), NI (38), AD (9), and GN (3).

Of the 1,572 graduates, 1,275 are neurologists, and an additional 12 report they are neurologist/internists, three pediatric/neurologists, and two psychiatrist/neurologists, which means 82% of UCNS graduates have a primary certification in neurology. A specific breakdown of the other specialties represented in each subspecialty may be found in the subspecialty-specific section of the report. Twenty-seven program graduates are certified in Canada, nine by the American Osteopathic Association, and 1,450 are boarded by an American Board of Medical Specialties board.

FELLOW ENROLLMENT, COMPLETION, AND UCNS CERTIFICATION

Fellow Enrollment

The information provided for fellow enrollment is limited to first-year enrollment as not all programs offer a second- or third-year option. Most programs (n=94) enroll only one fellow; however, the number of requested fellows per year varies from one to six fellows per year. The following tables illustrate the number of fellowship spots approved for the 218 programs accredited as of June 1, 2021. Approved fellows that include a .5 are noted as such because the program either has requested a different number of fellows each year (e.g., 1 in odd years and 2 in even years), or because a fellow must complete an entire multiple-year program before the program will enroll another fellow.

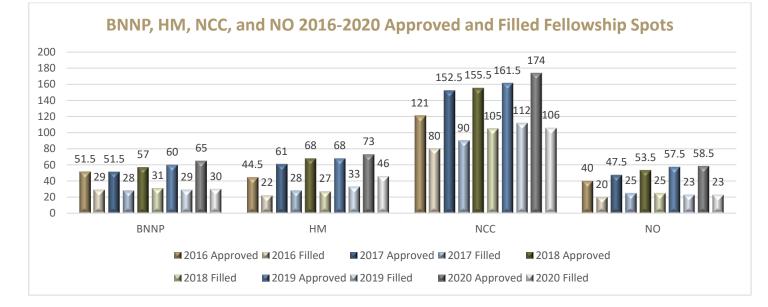
| Breakdow | Breakdown of UCNS Programs/Fellow Counts | | | | | |
|----------|------------------------------------------|--|--|--|--|--|
| Programs | Approved Number of Fellows | | | | | |
| 1 | 0.5 | | | | | |
| 94 | 1 | | | | | |
| 4 | 1.5 | | | | | |
| 73 | 2 | | | | | |
| 5 | 2.5 | | | | | |
| 23 | 3 | | | | | |
| 5 | 4 | | | | | |
| 2 | 4.5 | | | | | |
| 5 | 5 | | | | | |
| 1 | 5.5 | | | | | |
| 5 | 6 | | | | | |

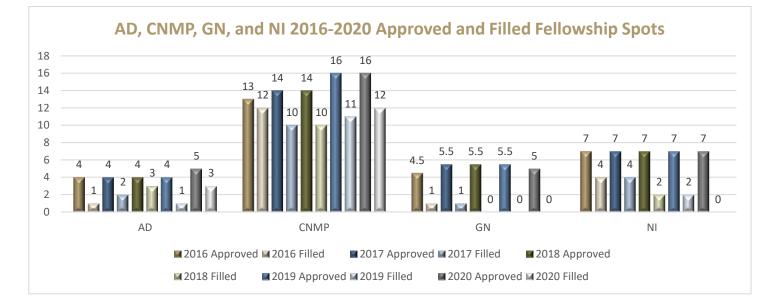
Available Fellowship Spots by Year by Subspecialty

| Year | AD | BNNP | CNMP | GN | HM | NCC | NI | NO |
|-------|----|------|------|----|-----|--------|----|-------|
| 2006 | | 21 | | | | | | |
| 2007 | | 25 | | | 17 | | | |
| 2008 | | 26 | | | 20 | 30 | | 14.5 |
| 2009 | | 26 | | | 22 | 73.5 | 3 | 19 |
| 2010 | | 29 | | | 22 | 91 | 5 | 24 |
| 2011 | | 29 | | | 26 | 95 | 5 | 24 |
| 2012 | 0 | 33 | | 1 | 33 | 120.5 | 5 | 30 |
| 2013 | 1 | 39 | 16 | 1 | 39 | 130 | 5 | 36 |
| 2014 | 3 | 45 | 16 | 4 | 42 | 134 | 5 | 42 |
| 2015 | 3 | 51 | 16 | 4 | 50 | 139 | 7 | 46.5 |
| 2016 | 4 | 54 | 15 | 4 | 51 | 148 | 7 | 47.5 |
| 2017 | 4 | 54 | 15 | 5 | 61 | 158 | 7 | 53.5 |
| 2018 | 4 | 57 | 16 | 5 | 68 | 159 | 7 | 56.5 |
| 2019 | 4 | 60 | 16 | 5 | 72 | 161.5 | 7 | 57.5 |
| 2020 | 5 | 65 | 16 | 5 | 76 | 175 | 7 | 58.5 |
| TOTAL | 28 | 614 | 126 | 34 | 599 | 1614.5 | 70 | 509.5 |

Enrollment Comparisons: 2016, 2017, 2018, 2019, 2020

With the implementation of the annual reporting system in 2016, UCNS has a mechanism to compare program statistics on a year-to-year basis. Previously, program information was collected only when a program was due for an accreditation review, which occurs between one and five years. A comparison of the approved fellowship spots and first-year fellow enrollment between 2016, 2017, 2018, 2019, and 2020 follows. As shown, fellow fill rates fluctuate. Some of the historical fluctuation may be attributed to fellow attrition, but no programs were lost to attrition in NCC or NO in 2020, though the numbers enrolled in those programs fell or remained the same respectively from 2019 to 2020. No fellows enrolled in GN programs 2018, 2019, or 2020 and no fellows were enrolled in an NI program in 2020. BNNP, HM, AD, and CNMP all showed enrollment growth between 2019 and 2020, with HM increasing the most with 13 additional fellows in 2020. It is important to once again note that these enrollment numbers account only for fellows enrolled in Year 1. NI enrollment in 2020 does include a fellow enrolled in Year 2. No fellows are enrolled in either Years 1 or 2 for GN.





2020-2021 UCNS Accreditation Annual Report

Fellow Completion and Certification

Of the 1,572 graduates, 1,067 (67.8%) have gone on to pursue UCNS certification, with another 53 who have applied to take the 2021 examinations (NCC and NO). If all candidates pass their respective certification examinations, the number of graduates who are certified will increase to 1,120 (71.2%). It is important to note that the 1,572 graduates include fellows who are not boarded through the American Board of Medical Specialty (ABMS), Royal College of Physicians and Surgeons of Canada (RCPSC), or American Osteopathic Association (AOA) and are not eligible for a UCNS certification examination (85), and those who have graduated from a subspecialty when no examination has been available (GN=3). Removing these graduates increases the percentage certified to 74.1% of graduates who have sought UCNS certification following completion of an accredited program. A breakdown of the graduates per year per subspecialty, with certification rates, is as follows. The data from 2018 and 2019 is also available for comparison. It is interesting to note that, while not illustrated in the table below, the data shows there is a significant number of fellows who do not apply for the first available certification examination after their graduation.

| | AD | BNNP | CNMP | GN | HM | NCC | NI | NO |
|------------------------------------------------------------|--------------|--------------|--------------|----|--------------|--------------|--------------|--------------|
| Total Graduates Through 2020 | 9 | 245 | 60 | 3 | 247 | 746 | 38 | 224 |
| Total Graduates Certified Through 2020 | 5 | 165 | 16 | 0 | 193 | 500 | 27 | 161 |
| 2021 Certification Applications | NA | NA | 6 | NA | NA | 25 | NA | 22 |
| Percent Certified (% if all applicants pass) | 56% | 67% | 27% (37%) | 0% | 78% | 67% (70%) | 71% | 72% (82%) |
| Total Graduates Through 2018 | 7 | 200 | 42 | 3 | 189 | 567 | 35 | 177 |
| Total Percent Certified Reported in 2018 (with applicants) | 43% | 70% | 31% (36%) | 0% | 82% | 72% (84%) | 69% | 66% (84%) |
| Total Graduates Through 2019 | 8 | 218 | 52 | 3 | 213 | 652 | 37 | 201 |
| Total Percent Certified Reported in 2019 (with applicants) | 38% (63%) | 62% (72%) | 29% | 0% | 72% (81%) | 76% | 65% (73%) | 77% |

Graduates Seeking Certification

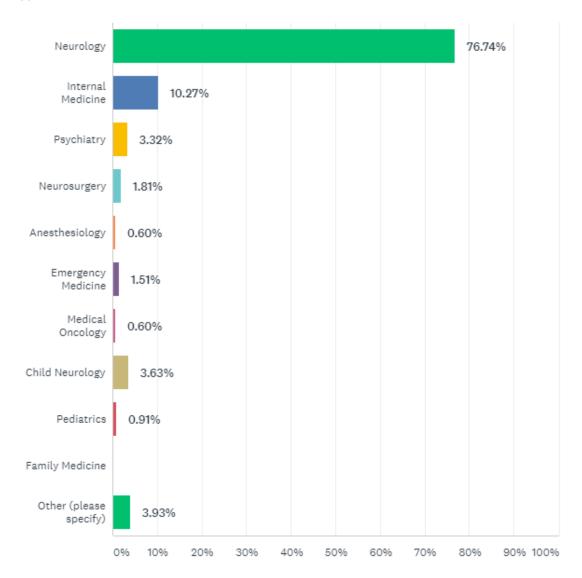
FELLOWSHIP EVALUATION SURVEY

Introduction

From May 28 through June 30, 2021, UCNS surveyed 369 fellows enrolled in a UCNS-accredited fellowship. Two fellows with undeliverable or no email addresses were unable to receive the survey invitation. Reminder emails for those who did not complete the survey were sent periodically during the collection period. Emails were also sent to program directors and program coordinators asking them to encourage their fellows to complete the survey. A reminder email was also sent to program directors and coordinators with fellows who had not yet completed the survey. Responses from 333 fellows were collected, of which 331 completed the survey. Fellows from 136 of the 137 programs with self-reported enrolled fellows responded. Usually, fellow enrollment data and contact information is collected using the annual report. However, with suspension of the 2019-2020 annual report due to the COVID-19 pandemic, a separate survey was sent to programs collecting fellow enrollment, completion, and contact data. This information was used to determine fellows who should receive the survey. The highest number of responders identified as fellows enrolled in an NCC program (178), followed by HM (50), BNNP (44), NO (40), CNMP (15), AD (3), and NI and GN with one each. Fellows were asked to identify their primary specialty. Most of the respondents reported being primarily certified in Neurology (254), followed by the specialties identified in the following chart. "Other" is comprised of geriatrics (2), Neuro-oncology (2), Pulmonary/Critical Care Medicine (1), General Surgery (2), Radiation Oncology (1), Physical Medicine and Rehabilitation (1), Critical Care Medicine (2), and Neurocritical Care (2).

What is your primary specialty?

Answered: 331 Skipped: 0



Two hundred fellows reported being enrolled in their first year, 121 in their second year, and 10 in the third year of their fellowship, with 207 graduating in 2021.

Compliance with the Program Requirements

Fellows were next asked a series of questions to confirm their program's compliance with specific program requirements, responses of which are summarized below. Narrative comments are not provided.

There is administrative support available to me.

Answered: 331 Skipped: 0

| ANSWER CHOICES | RESPONSES | • |
|----------------|-----------|-----|
| ✓ Yes | 97.89% | 324 |
| ✓ No | 2.11% | 7 |
| TOTAL | | 331 |

Faculty in my fellowship provide appropriate supervision for my clinical work (neither too little nor too much).

Answered: 331 Skipped: 0

| ANSWER CHOICES | RESPONSES | * |
|----------------|-------------------------------|-----|
| - Always | 74.32% | 246 |
| ✓ Usually | 24.77% | 82 |
| ✓ Rarely | 0.91% | 3 |
| ✓ Never | 0.00% | 0 |
| TOTAL | | 331 |

Faculty members are interested in my fellowship education.

| ANSWER CHOICES | ▼ F | RESPONSES | • |
|---------------------------|-----|-----------|-----|
| - Always | 7 | 71.30% | 236 |
| ✓ Usually | 2 | 25.98% | 86 |
| ✓ Rarely | 2 | 2.72% | 9 |
| Never | C | 0.00% | 0 |
| TOTAL | | | 331 |

I am able to review all of my performance evaluations.

Answered: 331 Skipped: 0

| ANSWER CHOICES | * RESPONSES | • |
|----------------------------|-------------|-----|
| Always | 73.11% | 242 |
| ✓ Usually | 16.62% | 55 |
| ✓ Rarely | 7.55% | 25 |
| ✓ Never | 2.72% | 9 |
| TOTAL | | 331 |

I evaluate program faculty at least once per year.

Answered: 331 Skipped: 0

| ANSWER CHOICES | RESPONSES | • |
|----------------|-------------------------------|-----|
| ✓ Yes | 88.22% | 292 |
| ▼ No | 11.78% | 39 |
| TOTAL | | 331 |

I evaluate the program at least once per year.

Answered: 331 Skipped: 0

| ANSWER CHOICES | RESPONSES | • |
|----------------|-------------------------------|-----|
| ✓ Yes | 92.45% | 306 |
| ✓ No | 7.55% | 25 |
| TOTAL | | 331 |

The program director treats my evaluations of faculty and the program as confidentially as possible.

| ANSWER CHOICES | RESPONSES | • |
|---------------------------|-------------------------------|-----|
| - Always | 85.50% | 283 |
| - Usually | 11.48% | 38 |
| ✓ Rarely | 1.21% | 4 |
| Never | 1.81% | 6 |
| TOTAL | | 331 |

Fellow feedback is and has been used to help improve the program.

Answered: 331 Skipped: 0

| ANSWER CHOICES | RESPONSES | • |
|----------------------------|-------------------------------|-----|
| Always | 63.14% | 209 |
| ✓ Usually | 25.68% | 85 |
| ✓ Rarely | 5.14% | 17 |
| ▼ Never | 1.21% | 4 |
| - Unknown | 4.83% | 16 |
| TOTAL | | 331 |

Feedback provided to me is timely.

Answered: 331 Skipped: 0

| ANSWER CHOICES | RESPONSES | • |
|----------------------------|-------------------------------|-----|
| Always | 67.37% | 223 |
| ✓ Usually | 27.49% | 91 |
| ✓ Rarely | 4.53% | 15 |
| ✓ Never | 0.60% | 2 |
| TOTAL | | 331 |

Feedback provided to me has helped direct my learning.

| ANSWER CHOICES | * | RESPONSES | * |
|--------------------------------------------------|---|-----------|-----|
| Always | | 70.39% | 233 |
| ✓ Usually | | 25.98% | 86 |
| ✓ Rarely | | 3.02% | 10 |
| ▼ Never | | 0.30% | 1 |
| I have not received feedback | | 0.30% | 1 |
| TOTAL | | | 331 |

I have opportunities to participate in research and other scholarly activity.

Answered: 331 Skipped: 0

| ANSWER CHOICES | • | RESPONSES | • |
|------------------------------------------------|---|-----------|-----|
| ✓ Strongly agree | | 71.30% | 236 |
| ✓ Agree | | 23.26% | 77 |
| Neither agree nor disagree | | 4.23% | 14 |
| ✓ Disagree | | 1.21% | 4 |
| Strongly disagree | | 0.00% | 0 |
| TOTAL | | | 331 |

My education has not been compromised by service requirements. Service is defined as activities that should be routinely performed by non-physicians, such as routine transportation of patients and routine phlebotomy. Taking care of patients and documentation are education and not service.

Answered: 331 Skipped: 0

| ANSWER CHOICES | • | RESPONSES | • |
|------------------------------------------------|---|-----------|-----|
| Strongly agree | | 69.49% | 230 |
| ✓ Agree | | 21.75% | 72 |
| Neither agree nor disagree | | 3.93% | 13 |
| ✓ Disagree | | 3.32% | 11 |
| Strongly disagree | | 1.51% | 5 |
| TOTAL | | | 331 |

The variety of patients in my program is comprehensive for my fellowship field.

| ANSWER CHOICES | • | RESPONSES | * |
|------------------------------------------------|---|-----------|-----|
| ✓ Strongly agree | | 79.46% | 263 |
| ✓ Agree | | 18.73% | 62 |
| Neither agree nor disagree | | 0.60% | 2 |
| ✓ Disagree | | 1.21% | 4 |
| ✓ Strongly disagree | | 0.00% | 0 |
| TOTAL | | | 331 |

Patient handovers are very effective in my program.

Answered: 331 Skipped: 0

| ANSWER CHOICES | • | RESPONSES | • |
|------------------------------------------------|---|-----------|-----|
| ✓ Strongly agree | | 51.96% | 172 |
| ✓ Agree | | 29.91% | 99 |
| Neither agree nor disagree | | 7.25% | 24 |
| ✓ Disagree | | 1.81% | 6 |
| ✓ Strongly disagree | | 0.00% | 0 |
| ✓ Not applicable | | 9.06% | 30 |
| TOTAL | | | 331 |

My education has not been compromised by too many other trainees (i.e., residents, medical students, allied health, etc.)

Answered: 331 Skipped: 0

| ANSWER CHOICES | • | RESPONSES | • |
|------------------------------------------------|---|-----------|-----|
| ✓ Strongly agree | | 68.58% | 227 |
| ✓ Agree | | 22.36% | 74 |
| Neither agree nor disagree | | 3.63% | 12 |
| ✓ Disagree | | 3.02% | 10 |
| Strongly disagree | | 2.42% | 8 |
| TOTAL | | | 331 |

I can raise concerns to my program director, department, or graduate medical education leadership without fear of reprisal.

| ANSWER CHOICES | • | RESPONSES | • |
|------------------------------------------------|---|-----------|-----|
| ✓ Strongly agree | | 69.18% | 229 |
| ✓ Agree | | 20.85% | 69 |
| Neither agree nor disagree | | 7.25% | 24 |
| ✓ Disagree | | 2.72% | 9 |
| Strongly disagree | | 0.00% | 0 |
| TOTAL | | | 331 |

I am provided with progressive responsibility for patient care in my fellowship program, and the criteria for reaching new levels of progressive responsibility have been made clear to me by the program.

Answered: 331 Skipped: 0

| ANSWER CHOICES | • | RESPONSES | • |
|------------------------------|---|-----------|-----|
| ✓ Strongly agree | | 67.98% | 225 |
| ✓ Agree | | 22.96% | 76 |
| ✓ Neither agree nor disagree | | 7.25% | 24 |
| ✓ Disagree | | 1.51% | 5 |
| ✓ Strongly disagree | | 0.30% | 1 |
| TOTAL | | | 331 |

In my program, I participate in interprofessional teams in patient management.

Answered: 331 Skipped: 0

| ANSWER CHOICES | • | RESPONSES | • |
|------------------------------------------------|---|-----------|-----|
| ✓ Strongly agree | | 80.06% | 265 |
| ✓ Agree | | 19.03% | 63 |
| Neither agree nor disagree | | 0.60% | 2 |
| ✓ Disagree | | 0.30% | 1 |
| ✓ Strongly disagree | | 0.00% | 0 |
| TOTAL | | | 331 |

There are didactics specifically for the fellow(s) in my fellowship specialty in my program.

| ANSWER CHOICES | • | RESPONSES | • |
|------------------------------|---|-----------|-----|
| ✓ Strongly agree | | 67.07% | 222 |
| ✓ Agree | | 22.66% | 75 |
| ✓ Neither agree nor disagree | | 6.04% | 20 |
| ✓ Disagree | | 3.32% | 11 |
| ✓ Strongly disagree | | 0.91% | 3 |
| TOTAL | | | 331 |

In my program, there are systems in place for me to transition care to another provider if I am too fatigued.

Answered: 331 Skipped: 0

| ANSWER CHOICES | • | RESPONSES | • |
|------------------------------|---|-----------|-----|
| ✓ Strongly agree | | 49.85% | 165 |
| ✓ Agree | | 29.00% | 96 |
| ✓ Neither agree nor disagree | | 15.11% | 50 |
| ✓ Disagree | | 3.63% | 12 |
| ✓ Strongly disagree | | 2.42% | 8 |
| TOTAL | | | 331 |

I work less than an average of 80 hours a week averaged over four weeks and have one day off in seven days averaged over four weeks.

Answered: 331 Skipped: 0

| ANSWER CHOICES | RESPONSES | • |
|----------------|-------------------------------|-----|
| ✓ Yes | 98.49% | 326 |
| ▼ No | 1.51% | 5 |
| TOTAL | | 331 |

In-house overnight call is not more frequent than every third night averaged over four weeks and the duration of night float is not more than six nights in a row.

| ANSWER CHOICES | RESPONSES | * |
|----------------------------|-------------------------------|-----|
| Always | 51.06% | 169 |
| ✓ Usually | 4.83% | 16 |
| ✓ Rarely | 1.21% | 4 |
| ✓ Never | 3.02% | 10 |
| ✓ Not applicable | 39.88% | 132 |
| TOTAL | | 331 |

The maximum duration of a work shift is 24 hours plus an additional four hours for patient handovers and after a 24-hour shift I have at least 14 hours off.

Answered: 331 Skipped: 0

| ANSWER CHOICES | RESPONSES | * |
|------------------------------------|-------------------------------|-----|
| Always | 58.01% | 192 |
| ✓ Usually | 5.44% | 18 |
| Rarely | 0.91% | 3 |
| Never | 0.60% | 2 |
| Not applicable | 35.05% | 116 |
| TOTAL | | 331 |

I have at least eight hours off between work duty periods.

Answered: 331 Skipped: 0

| ANSWER CHOICES | RESPONSES | * |
|----------------------------|-------------------------------|-----|
| Always | 92.15% | 305 |
| ✓ Usually | 7.85% | 26 |
| ✓ Rarely | 0.00% | 0 |
| Never | 0.00% | 0 |
| TOTAL | | 331 |

At-home call includes telemedicine or remote monitoring.

| ANSWER CHOICES | ▼ RESPONSES | • |
|------------------------------------|-------------|-----|
| ✓ Yes | 30.21% | 100 |
| ✓ No | 12.39% | 41 |
| Not applicable | 57.70% | 191 |
| Total Respondents: 331 | | |

I am included in the process of reviewing the goals and objectives of the fellowship.

Answered: 331 Skipped: 0

| ANSWER CHOICES | RESPONSES | * |
|----------------|-----------|-----|
| ✓ Yes | 87.01% | 288 |
| ✓ No | 12.99% | 43 |
| TOTAL | | 331 |

COVID-19

Specific to this year's survey, fellows were next asked a series of questions concerning the impact of the COVID-19 pandemic on their educational experience.

My sponsoring and primary institutions provided adequate safety protection for me during the COVID-19 pandemic.

Answered: 331 Skipped: 0

| ANSWER CHOICES | • | RESPONSES | • |
|------------------------------------------------|---|-----------|-----|
| ✓ Strongly agree | | 80.06% | 265 |
| ✓ Agree | | 18.13% | 60 |
| Neither agree nor disagree | | 1.81% | 6 |
| ✓ Disagree | | 0.00% | 0 |
| ✓ Strongly disagree | | 0.00% | 0 |
| TOTAL | | | 331 |

My program adequately addressed my health and safety during the pandemic.

| ANSWER CHOICES | • | RESPONSES | * |
|------------------------------------------------|---|-----------|-----|
| Strongly agree | | 78.55% | 260 |
| ✓ Agree | | 18.73% | 62 |
| Neither agree nor disagree | | 1.51% | 5 |
| ✓ Disagree | | 1.21% | 4 |
| Strongly disagree | | 0.00% | 0 |
| TOTAL | | | 331 |

My clinical training (not direct education) was not compromised or altered by COVID-19.

Answered: 331 Skipped: 0

| ANSWER CHOICES | • | RESPONSES | • |
|------------------------------|---|-----------|-----|
| ✓ Strongly agree | | 46.22% | 153 |
| ✓ Agree | | 28.70% | 95 |
| ✓ Neither agree nor disagree | | 9.67% | 32 |
| ▼ Disagree | | 13.60% | 45 |
| ✓ Strongly disagree | | 1.81% | 6 |
| TOTAL | | | 331 |

My program found ways to compensate for changes in my clinical training due to COVID-19.

Answered: 331 Skipped: 0

| ANSWER CHOICES | * | RESPONSES | • |
|------------------------------------------------|---|-----------|-----|
| ✓ Strongly agree | | 54.38% | 180 |
| ✓ Agree | | 27.19% | 90 |
| Neither agree nor disagree | | 15.71% | 52 |
| ✓ Disagree | | 2.72% | 9 |
| Strongly disagree | | 0.00% | 0 |
| TOTAL | | | 331 |

If your program compensated for changes to your clinical training, please share some examples of alternative clinical training or education that occurred during the pandemic.

Answered: 188 Skipped: 143

Please add any additional thoughts you have about the impact of COVID-19 on your fellowship.

Do you have any concerns about your program?

Answered: 331 Skipped: 0

| ANSWER CHOICES | RESPONSES | • |
|----------------|-----------|-----|
| ▼ Yes | 7.85% | 26 |
| ✓ No | 92.15% | 305 |
| TOTAL | | 331 |

If you indicated in the previous question that you have concerns about your program, would you like UCNS to contact you directly about your concerns?

Answered: 331 Skipped: 0

| ANSWER CHOICES | RESPONSES | • |
|------------------|-------------------------------|-----|
| ✓ Yes | 1.51% | 5 |
| ✓ No | 16.92% | 56 |
| ✓ Not Applicable | 81.57% | 270 |
| TOTAL | | 331 |

On a scale of one to five, with five being the best, how would you rate your fellowship experience?

Answered: 331 Skipped: 0

| • | 1 * | 2 * | 3 💌 | 4 * | 5 * | TOTAL * | WEIGHTED - AVERAGE |
|-----|------------|------------|-------------|--------------|---------------|---------|-----------------------|
| ▼ ☆ | 0.30% 1 | 0.91% 3 | 8.16% 27 | 29.91% 99 | 60.73% 201 | 331 | 4.50 |

My program has prepared me for independent practice in my subspecialty.

| ANSWER CHOICES | • | RESPONSES | • |
|---------------------------------------------------|---|-----------|-----|
| ✓ Yes | | 76.13% | 252 |
| ✓ No | | 0.30% | 1 |
| I am not graduating this year | | 23.56% | 78 |
| TOTAL | | | 331 |

If you are completing your program, do you have a position for employment in your subspecialty?

Answered: 331 Skipped: 0

| ANSWER CHOICES | • | RESPONSES | • |
|---------------------------------------------------|---|-----------|-----|
| ▼ Yes | | 54.38% | 180 |
| ▼ No | | 7.55% | 25 |
| I am not graduating this year | | 38.07% | 126 |
| TOTAL | | | 331 |

I plan to take the UCNS certification examination in my subspecialty (must be taken within four years of graduation).

Answered: 331 Skipped: 0

| ANSWER CHOICES | RESPONSES | * |
|----------------|-----------|-----|
| ▼ Yes | 82.78% | 274 |
| ▼ No | 17.22% | 57 |
| TOTAL | | 331 |

Analysis

The 90% (n=331) response rate exceeded initial expectations, providing UCNS with a solid foundation of data to continue monitoring outcomes thresholds. One hundred thirty-six programs were represented, with only one programs that self-identified as having at least one enrolled fellow not participating. Most of the survey responses indicate fellow-perceived compliance with the program requirements regarding resource availability, curriculum, evaluation, and duty hours requirements. Two hundred fifty-two fellows indicated that they felt their training program prepared them for independent practice in the subspecialty, with 78 indicating they would not be graduating this year. Only one fellow felt that their experience in the program did not prepare them for independent practice in the subspecialty. In addition, fellows rated their fellowship experience on a scale of one to five, with five being the best. The weighted average was 4.5, with 201 rating 5, 99 rating 4, 27 rating 3, 3 rating 2, and 1 rating 1.

When asked about taking the UCNS certification within four years of graduation, 57 respondents indicated they would be pursuing UCNS certification in the future. This more than doubled from the previous year's response with only 21 of 301 respondents indicating they would not be seeking UCNS certification. Most of the respondents cited the upcoming American Board of Psychiatry and Neurology NCC examination as the reason, while others indicated certification eligibility issues as the reason. The certification response supports the decreasing rate of graduates applying for the NCC examination presented earlier in this report.

As to be expected, COVID-19 impacted the fellow educational experience; however, evaluation results demonstrate that most programs found ways accommodate the disruption, relying heavily on technology when appropriate. A large majority of fellows felt that their safety was a priority of their training programs.

The data received in the survey will be used as program outcomes and will be shared with programs annually, along with a summary of the data received in the annual report. Outcomes for the survey will include both the response rate of fellows completing the survey and the responses themselves. Programs showing a trend of negative responses or who do not meet other identified benchmarks may trigger a comprehensive review. Other outcomes that will be tracked by UCNS include fellow recruitment, fellow graduation and attrition, fellow performance on certification examinations, fellow scholarly activity, and milestone submission (once implemented).

SUBSPECIALTY-SPECIFIC STATISTICS – through June 2021

The following information includes the year programs were first accredited in each subspecialty, the current number of accredited programs, and the number lost to attrition. In addition, the programs' duration, overseeing department, and program directors' specialties are included. For fellows, the number of graduates, number of graduates certified by UCNS, and the graduates' primary specialties and ABMS/RCPSC eligibility are listed. Enrollment numbers of approved and filled spots for 2016, 2017, 2018, 2019, and 2021 are also provided.

Subspecialty: Autonomic Disorders First program accredited in 2013

Fellowships

Currently Accredited: 5 | Attrition: 2 (2013, 2019) Program Construction: 1 year (4); 1 or 2 years (1) Departments: Neurology (4); Internal Medicine (1) Program Director Specialty: Neurology (3); Internal Medicine (2)

Fellows

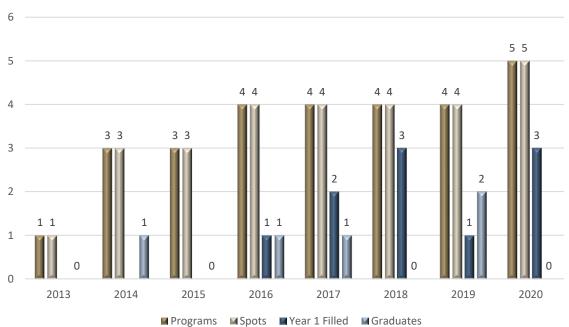
Graduates: 9 | UCNS Certified: 5 Primary Specialty: Neurology (9) | ABMS/RCPSC: ABMS (8)

Certification Pass Rates (tracking began in 2014)

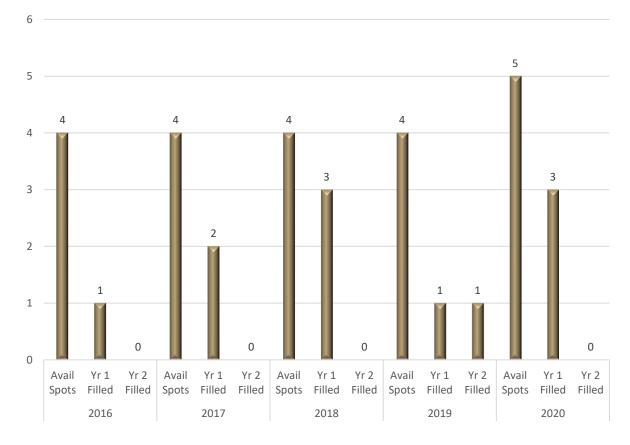
| | Pass Rate | | |
|------|-----------|------------|--|
| Year | Fellow | Non-Fellow | |
| 2016 | 100% | 90% | |
| 2018 | 100% | 100% | |
| 2020 | 100% | 83% | |

Enrollment

2016 Approved Spots: 5 | 2016 Filled: 1 2017 Approved Spots: 5 | 2017 Filled: 2 2018 Approved Spots: 5 | 2018 Filled: 3 2019 Approved Spots: 4 | 2019 Filled: Year 1 (1); Year 2 (1) 2020 Approved Spots: 5 | 2020 Filled: 3

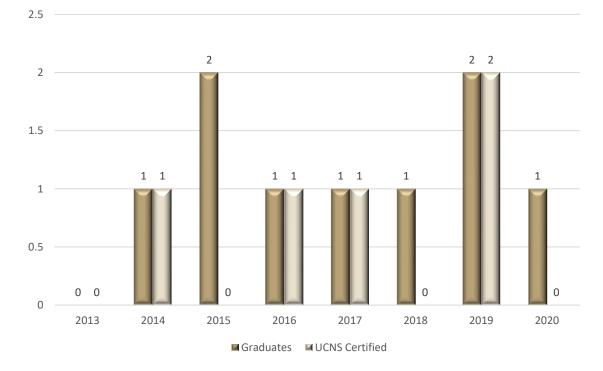


AD Fellowship Growth



AD 2016-2020 Fellow Enrollment





Subspecialty: Behavioral Neurology & Neuropsychiatry

First program accredited in 2006

Fellowships

Currently Accredited: 41 | Attrition: 5 (2009, 2010, 2016, 2020 x 2) Program Construction: 1 year (13); 2 years (3); 1 or 2 years (19); 1, 2, or 3 years (2); 2 or 3 years (1) Departments: Neurology (31); Neuro/IM (1); Psychiatry (9) Program Director Specialty: Neuro (29); Neuro/IM (1); Neuro/Psych (6); Psych (4); Psych/IM (1)

Fellows

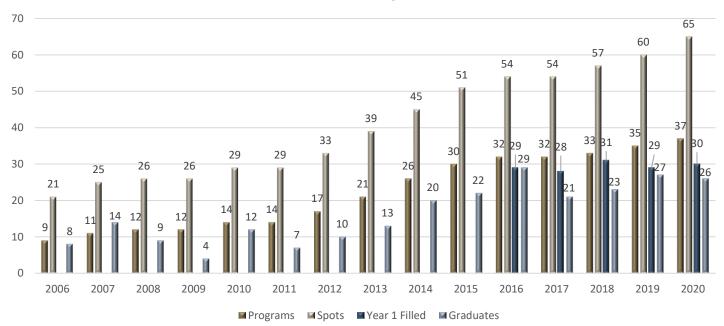
Graduates: 245 | UCNS Certified: 165 Primary Specialty: Neuro (163); Psychiatry (76); IM (2); IM/Ger (2); IM/Psych (1); Neuro/Psych (1) | ABMS/RCPSC: ABMS (223); RCPSC (12); AOA (1)

Certification Pass Rates (tracking began in 2014)

| | Pass Rate | | |
|------|-----------|------------|--|
| Year | Fellow | Non-Fellow | |
| 2014 | 100% | 83% | |
| 2016 | 96% | 82% | |
| 2018 | 96% | 83% | |
| 2020 | 98% | 96% | |

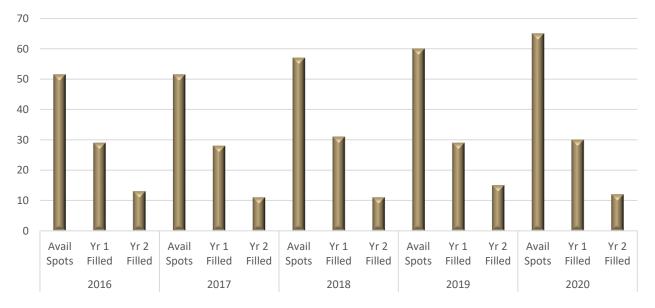
Enrollment

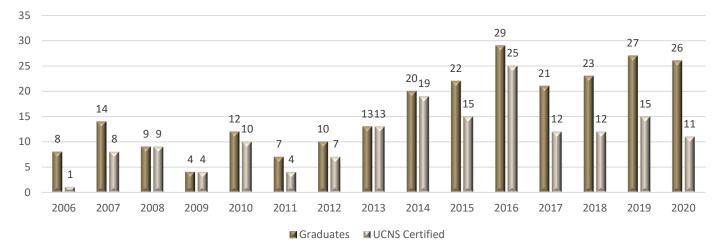
2016 Approved Spots: 51.5 | 2016 Filled: Year 1 (29); Year 2 (13) 2017 Approved Spots: 53 | 2017 Filled: Year 1 (28); Year 2 (11) 2018 Approved Spots: 56 | 2018 Filled: Year 1 (31); Year 2 (11) 2019 Approved Spots: 60 | 2019 Filled: Year 1 (29); Year 2 (15) 2020 Approved Spots: 65 | 2020 Filled: Year 1 (30); Year 2 (12)



BNNP Fellowship Growth

BNNP 2016-2020 Fellow Enrollment





BNNP Graduate Certification

Subspecialty: Clinical Neuromuscular Pathology First program accredited in 2013

Fellowships

Currently Accredited: 6 | Attrition: 0 Program Construction: 1 year (4); 1 or 2 years (2) Departments: Neurology (5); Neurology/Pediatrics (1) Program Director Specialty: Neurology (5); Neurology/Pediatrics (1)

Fellows

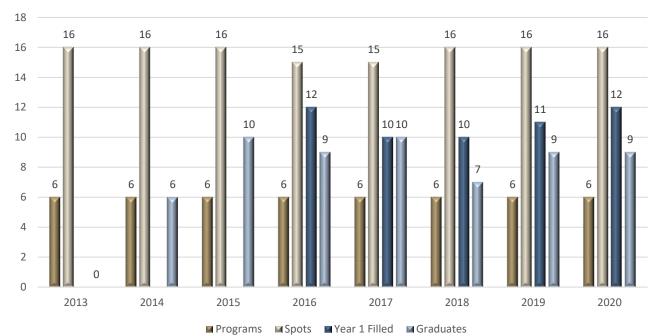
Graduates: 60 | UCNS Certified: 16 (6 applications received for 2021 examination) Primary Specialty: Neurology (58); Pediatrics (1); Peds Neuro (1) | ABMS/RCPSC: ABMS (51); RCPSC (3)

Certification Pass Rates (tracking began in 2014)

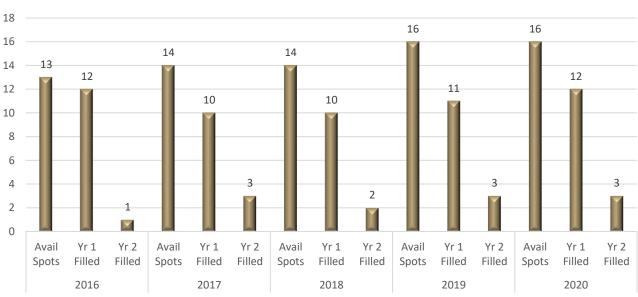
| | Pass Rate | | |
|------|-----------|------------|--|
| Year | Fellow | Non-Fellow | |
| 2015 | 86% | 94% | |
| 2017 | 80% | 100% | |
| 2019 | 100% | 100% | |

Enrollment

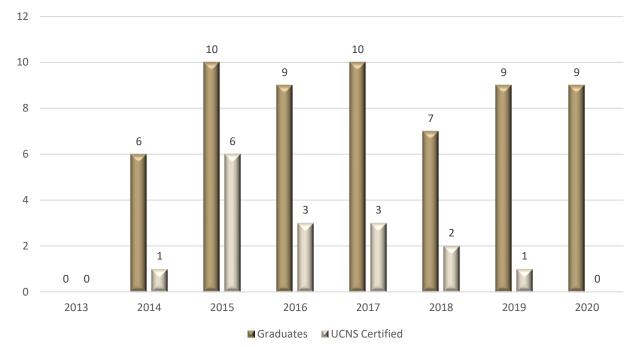
2016 Approved Spots: 13 | 2016 Filled: Year 1 (12); Year 2 (1) 2017 Approved Spots: 14 | 2017 Filled: Year 1 (10); Year 2 (3) 2018 Approved Spots: 14 | 2018 Filled: Year 1 (10); Year 2 (2) 2019 Approved Spots: 16 | 2019 Filled: Year 1 (11); Year 2 (2) 2020 Approved Spots: 16 | 2020 Filled: Year 1 (12); Year 2 (3)



CNMP Fellowship Growth



CNMP 2016-2020 Fellow Enrollment



CNMP Graduate Certification

Subspecialty: Geriatric Neurology First program accredited in 2010

Fellowships

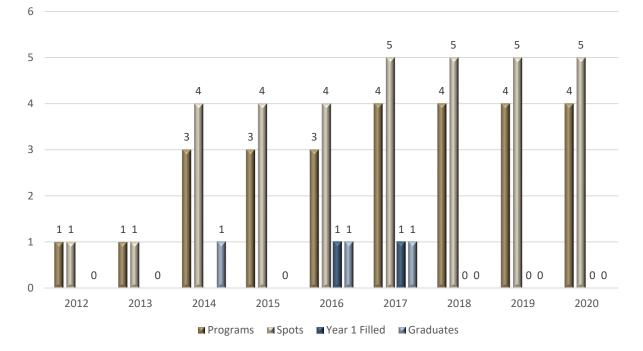
Currently Accredited: 4 | Attrition: 3 (2015 x 2, 2019) Program Construction: 1 year (2); 1 or 2 years (1); 2 or 3 years (1) Departments: All programs located within neurology departments Program Director Specialty: Neurology (4)

Fellows

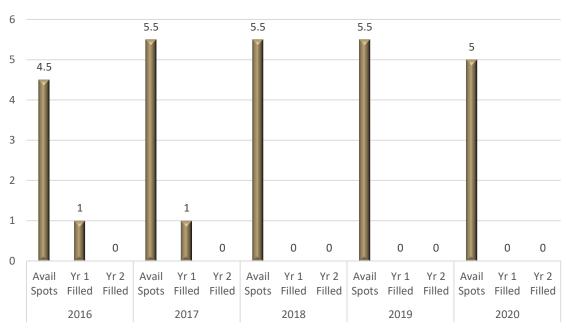
Graduates: 3 UCNS Certified: 0 (a UCNS examination has not been offered since fellows have graduated) Primary Specialty: Neurology (3) | ABMS/RCPSC: ABMS (3)

Enrollment

2016 Approved Spots: 4.5 | 2016 Filled: 1 2017 Approved Spots: 5.5 | 2017 Filled: 1 2018 Approved Spots: 5.5 | 2018 Filled: 0 2019 Approved Spots: 5.5 | 2019 Filled: 0 2020 Approved Spots: 5 | 2020 Filled: 0

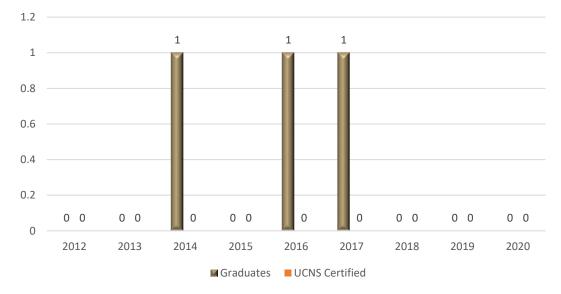


GN Fellowship Growth



GN 2016-2020 Fellow Enrollment

GN Graduate Certification



Certification in this subspecialty was sunset in 2019.

Fellowships

Currently Accredited: 46 | Attrition: 6 (2009, 2013, 2017 x 2; 2019, 2020) Program Construction: 1 year (43); 1 or 2 years (2); 1, 2, or 3 years (1) Departments: Neuro (40); Peds Neuro (2); Peds (3); Psych (1) Program Director Specialty: Neurology (43); Child Neuro (2); Peds Neuro (1)

Fellows

Graduates: 247 | UCNS Certified: 193

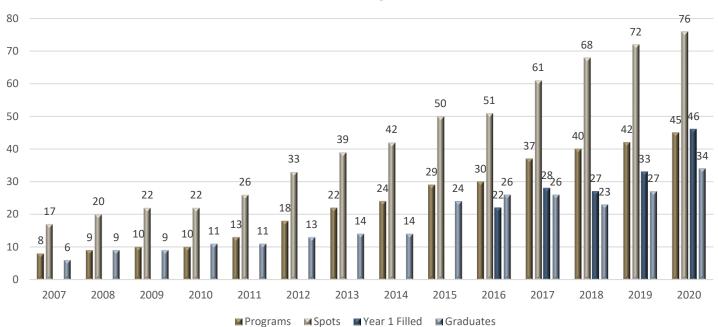
Primary Specialty: Neuro (223); Family Med (7); IM (6); Physiatry (3); Peds (2); Psych (2); Child Neuro (1); Peds Neuro (1); Ophthalmology (1); Dentistry (1) | ABMS/RCPSC: ABMS (219); RCPSC (7); AOA (5)

Certification Pass Rates (tracking began in 2014)

| | Pass Rate | | |
|------|-----------|------------|--|
| Year | Fellow | Non-Fellow | |
| 2014 | 100% | 83% | |
| 2016 | 96% | 82% | |
| 2018 | 96% | 83% | |
| 2020 | 98% | 96% | |

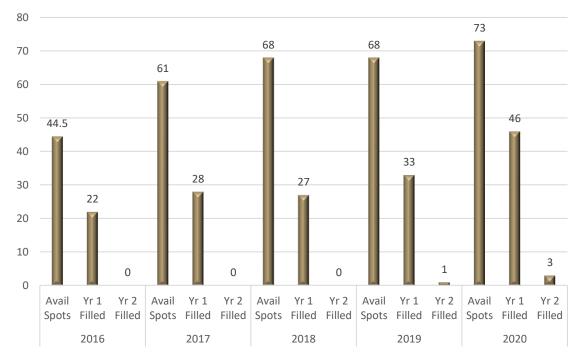
Enrollment

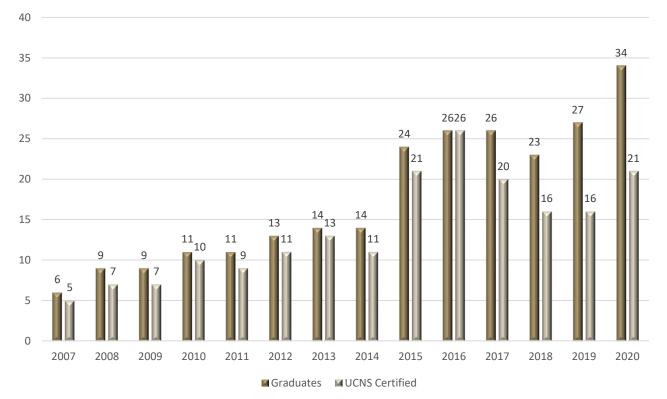
2016 Approved Spots: 44.5 | 2016 Filled: Year 1 (22); Year 2 (0) 2017 Approved Spots: 61 | 2017 Filled: Year 1 (28); Year 2 (0) 2018 Approved Spots: 68 | 2018 Filled: Year 1 (27); Year 2 (0) 2019 Approved Spots: 68 | 2019 Filled: Year 1 (33); Year 2 (1) 2020 Approved Spots: 73 | 2020 Filled: Year 1 (46); Year 2 (3)



HM Fellowship Growth

HM 2016-2020 Fellow Enrollment





HM Graduate Certification

Fellowships

Currently Accredited: 75 | Attrition: 1 (2019) Program Construction: 2 years (28); 1 or 2 years (46); 1, 2, or 3 (1) | post-graduate critical care medicine training (14); post-graduate neurosurgery (3); both (30) Departments: Neuro (53); NS (15); CCM (3); Anesth (1); Infectious Disease (1); IM (2) Program Director Specialty: Neuro (62); Neuro/IM (5); Emer Med (3); IM (3); NS (1); Anesth (1)

Fellows

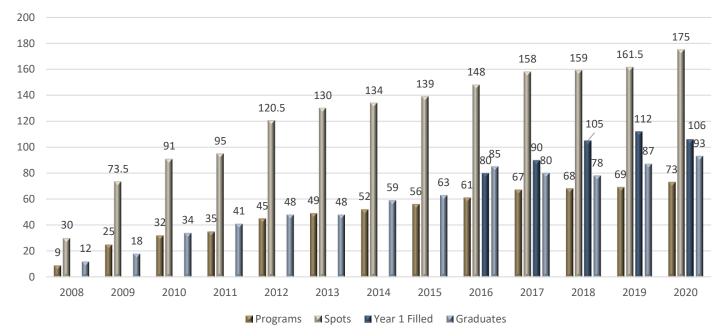
Graduates: 746 | UCNS Certified: 500 (25 applications received for 2020 certification examination) Primary Specialty: Neuro (577); IM (76); EM (37); Anesth (19); NS (19); IM/Neuro (12); Radiology (2); Family Med (1); Anesth/IM (1); Pulm (1); Vas Sur (1) | ABMS/RCPSC: ABMS (700); AOA (2); RCPSC (1)

Certification Pass Rates (tracking began in 2014)

| | Pass Rate | | |
|------|-----------|------------|--|
| Year | Fellow | Non-Fellow | |
| 2013 | 94% | 73% | |
| 2015 | 96% | 47% | |
| 2017 | 86% | 51% | |
| 2019 | 83% | 70% | |

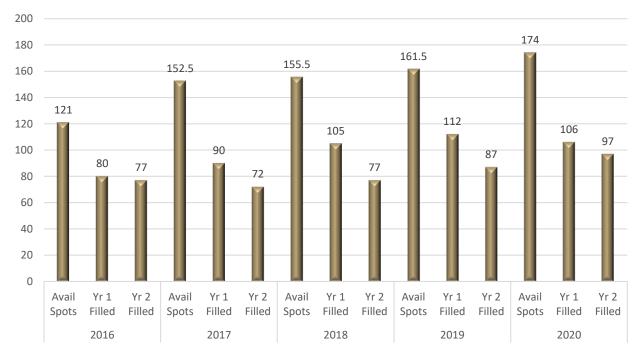
Enrollment

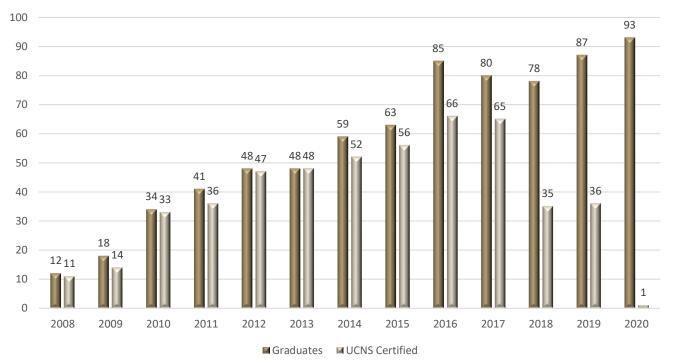
2016 Approved Spots: 121 | 2016 Filled: Year 1 (80); Year 2 (77) 2017 Approved Spots: 152.5 | 2017 Filled: Year 1 (90); Year 2 (72) 2018 Approved Spots: 155.5 | 2018 Filled: Year 1 (105); Year 2 (77) 2019 Approved Spots: 161.5 | 2019 Filled: Year 1 (112); Year 2 (87) 2020 Approved Spots: 174 | 2020 Filled: Year 1 (106); Year 2 (97)



NCC Fellowship Growth

NCC 2016-2020 Fellow Enrollment





NCC Graduate Certification

Subspecialty: Neuroimaging First program accredited in 2009

Fellowships

Currently Accredited: 4 | Attrition: 2 (2013; 2019) Program Construction: All four programs are one year in duration Departments: All four programs located within neurology departments Program Director Specialty: All four program directors are neurologists

Fellows

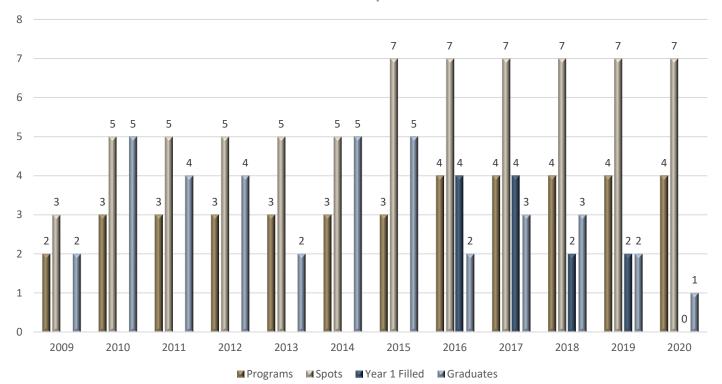
Graduates: 38 | UCNS Certified: 27 Primary Specialty: Neurology (37); Unknown (1) | ABMS/RCPSC: ABMS (33); Unknown (1)

Certification Pass Rates (tracking began in 2014)

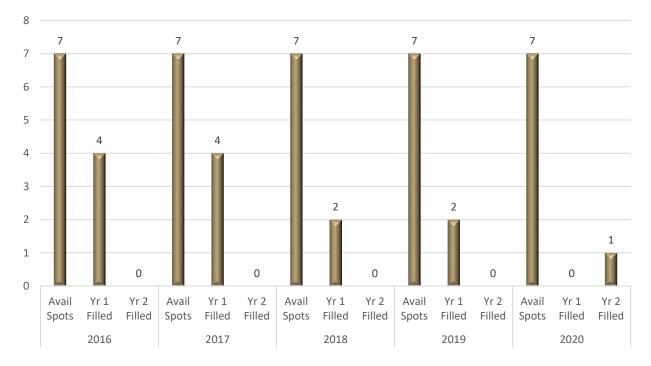
| | Pass Rate | | |
|------|-----------|------------|--|
| Year | Fellow | Non-Fellow | |
| 2015 | 90% | 86% | |
| 2017 | 100% | 84% | |
| 2019 | 100% | 100% | |

Enrollment

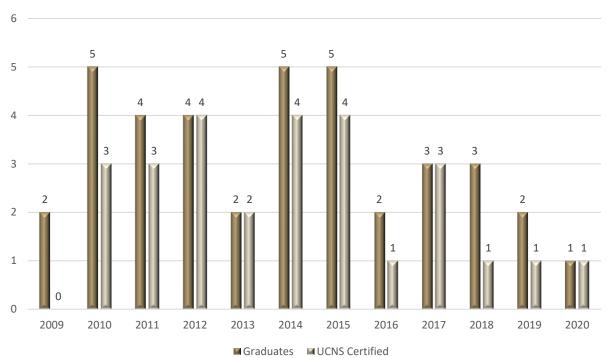
2016 Approved Spots: 7 | 2016 Filled: 4 2017 Approved Spots: 7 | 2017 Filled: 4 2018 Approved Spots: 7 | 2018 Filled: 2 2019 Approved Spots: 7 | 2019 Filled: 2 2020 Approved Spots: 7 | 2020 Filled: Year 1 (0); Year 2 (1)



NI 2016-2020 Fellow Enrollment



NI Fellowship Growth



NI Graduate Certification

Fellowships

Currently Accredited: 37 | Attrition: 1 (2015) Program Construction: 1 year (9); 2 years (6); 1 or 2 years (18); 1, 2, or 3 years (3); 2 or 3 years (1) Departments: Neurology (31); Neurosurgery (5); Psychiatry (1) Program Director Specialty: Neurology (35); IM (1); Neuro Peds (1)

Fellows

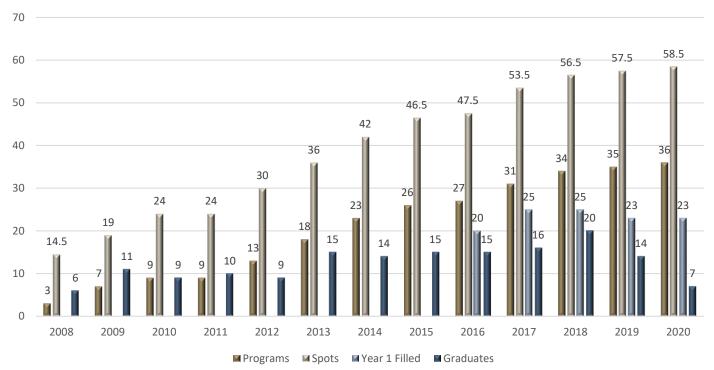
Graduates: 224 | UCNS Certified: 161 (22 applications received for 2020 certification examination) Primary Specialty: Neuro (205); Hem-Onc (4); IM (4); Med Onc (3); IM/Med Onc (2); NS (2); Peds (1); Psych/Neuro (1); IM/Hem-Onc (1); Peds/Hem Onc (1) | ABMS/RCPSC: ABMS (213); AOA (1); RCPSC (4)

Certification Pass Rates (tracking began in 2014)

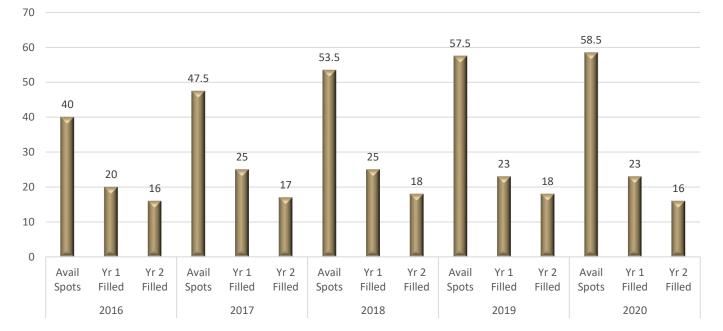
| | Pass Rate | |
|------|-----------|------------|
| Year | Fellow | Non-Fellow |
| 2015 | 89% | 76% |
| 2017 | 83% | 67% |
| 2019 | 77% | 56% |

Enrollment

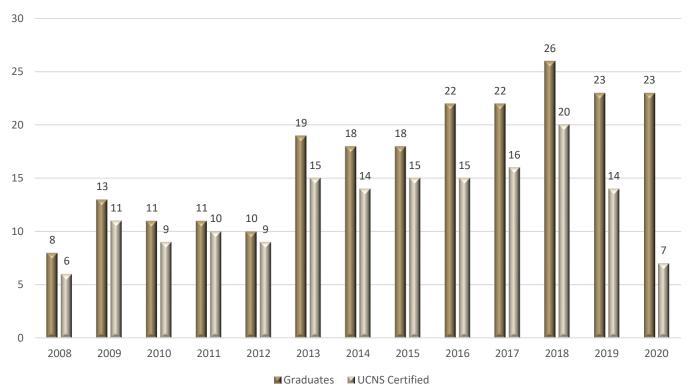
2016 Approved Spots: 40 | 2016 Filled: Year 1 (20); Year 2 (16) 2017 Approved Spots: 47.5 | 2017 Filled: Year 1 (25); Year 2 (17) 2018 Approved Spots: 53.5 | 2018 Filled: Year 1 (25); Year 2 (18) 2019 Approved Spots: 57.5 | 2019 Filled: Year 1 (23); Year 2 (18) 2020 Approved Spots: 58.5 | 2020 Filled: Year 1 (23); Year 2 (16)



NO Fellowship Growth



NO 2016-2020 Fellow Enrollment



NO Graduate Certification