2018 Accreditation Annual Report

UNITED COUNCIL FOR NEUROLOGIC SUBSPECIALTIES

Prepared By:

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United Council for Neurologic Subspecialties

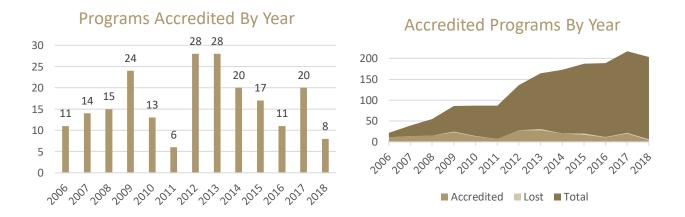
March 2019

INTRODUCTION

Every fall, data gathered from training program annual reports, accreditation applications, annual fellowship surveys, and program director surveys (as they occur) will be provided to the Accreditation Council, program directors, and Board. These tools will be 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 will also assess its current processes to determine whether adjustments are necessary to improve programs' accreditation experiences. The data presented in this report is through the fall accreditation cycle, December 1, 2018, 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). Because both Neural Repair and Rehabilitation (NRR) programs withdrew accreditation in 2018, no statistical information is provided for NRR programs.

PROGRAM GROWTH AND ATTRITION

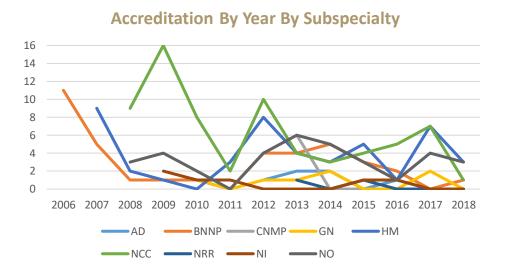
Since 2006, UCNS has accredited 211 programs in nine neurologic subspecialties. There are currently 197 programs accredited in eight subspecialties representing 35 states, the District of Columbia, and one Canadian province. Two applications are under review for spring approval, and as of March 2019, there are another eight programs in the application process. UCNS is present at 85 of the 154 institutions with ACGME-accredited neurology residencies, and 164 of the 201 programs are located within neurology departments. Program leadership (program directors and department chairs) are predominantly neurology based (84% and 82%), with a specific breakdown included in the subspecialty-specific section later in this report. As of December 1, 2018, the growth in the number of accredited programs in all subspecialties per year is shown in the chart below.



Despite continued growth, accreditation attrition has occurred for a variety of reasons, most often due to loss of key leadership or the inability to secure or maintain institutional support or funding. As of December 1, 2018, UCNS has lost 14 programs to attrition, with a 93% retention rate.

GROWTH PER YEAR PER SUBSPECIALTY

The number of programs accredited per year per subspecialty varies, starting with BNNP in 2006 through the newest subspecialties, CNMP and NRR, which both accredited their first programs in 2013. The chart below shows the growth per year per subspecialty.



From 2013 through 2017, UCNS can look at the trend in program growth among the subspecialties. NRR is included in this table because it did not lose its accredited programs until 2018. The table below illustrates accreditation growth over the period from 2013-2017. During this period, six of nine subspecialties saw an overall growth in the number of programs. No subspecialty saw an overall loss until the 2018 statistics are added in.

| | | | | | | Five-Ye | ar Change | | Six-Year | Change |
|--------------|------|------|------|------|------|---------|-----------|------|----------|--------|
| Subspecialty | 2013 | 2014 | 2015 | 2016 | 2017 | # | % | 2018 | # | % |
| AD | 2 | 4 | 4 | 5 | 5 | 3 | 150 | 5 | 3 | 150 |
| BNNP | 25 | 30 | 33 | 34 | 34 | 9 | 36 | 35 | 10 | 40 |
| CNMP | 6 | 6 | 6 | 6 | 6 | 0 | 0 | 6 | 0 | 0 |
| GN | 3 | 5 | 3 | 3 | 5 | 2 | 67 | 5 | 2 | 67 |
| НМ | 25 | 28 | 33 | 34 | 39 | 14 | 56 | 42 | 17 | 68 |
| NCC | 49 | 52 | 56 | 61 | 68 | 19 | 39 | 69 | 20 | 41 |
| NRR | 1 | 1 | 2 | 2 | 2 | 1 | 100 | 0 | -2 | -100 |
| NI | 3 | 3 | 4 | 5 | 5 | 2 | 67 | 5 | 0 | 67 |
| NO | 19 | 24 | 26 | 27 | 31 | 12 | 53 | 34 | 15 | 79 |

Five-Year Accreditation Growth Trend for Accredited Programs

FELLOWS

From 2006 through 2017, 1,060 physicians have filled 1,980 first-year fellowship spots and have graduated from currently accredited UCNS-accredited programs. Additional information by subspecialty is provided later in this report in the subspecialty-specific reports. The largest number of fellows have graduated from NCC (490) followed by BNNP (177), HM (167), NO (151), CNMP (34), NI (32), AD (6), and GN (3).

Of the 1,060 graduates, 865 are neurologists, and an additional 12 report they are neurologist/internists and one psychiatrist/neurologist, which means 83% 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. Seventeen program graduates are certified in Canada.

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=90) enroll only one fellow; however, the number of requested fellows per year varies from zero, for programs that are currently inactive, to six fellows per year. The following table illustrates the number of fellowship spots approved for the 197 programs that are currently accredited. 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.

| Breakdown of UCNS Programs/Fellow Counts | | | |
|--|----------------------------|--|--|
| Programs | Approved Number of Fellows | | |
| 3 | 0 | | |
| (inactive status) | | | |
| 2 | 0.5 | | |
| 90 | 1 | | |
| 4 | 1.5 | | |
| 62 | 2 | | |
| 3 | 2.5 | | |
| 15 | 3 | | |
| 6 | 4 | | |
| 2 | 4.5 | | |
| 7 | 5 | | |
| 3 | 6 | | |

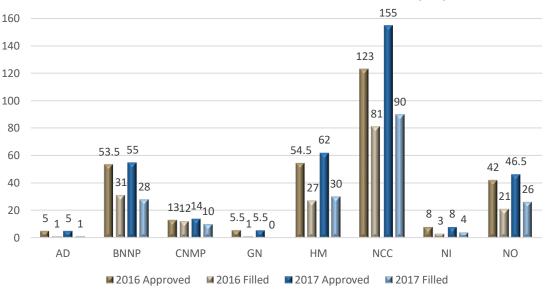
Available Fellowship Spots by Year by Subspecialty

| Year | AD | BNNP | CNMP | GN | HM | NCC | NI | NO |
|------|----|------|------|-----|------|-------|----|------|
| 2006 | | 14 | | | | | | |
| 2007 | | 20 | | | 10 | | | |
| 2008 | | 22 | | | 11 | 18 | | 10 |
| 2009 | | 26 | | | 13 | 49.5 | 3 | 13 |
| 2010 | | 25.5 | | | 15 | 63 | 5 | 17 |
| 2011 | | 25.5 | | | 18 | 70 | 6 | 18.5 |
| 2012 | | 28.5 | | 2 | 25 | 81.5 | 5 | 23.5 |
| 2013 | 2 | 34.5 | 13 | 2 | 29 | 88 | 5 | 28.5 |
| 2014 | 4 | 40.5 | 13 | 5 | 31 | 93 | 5 | 35.5 |
| 2015 | 4 | 52.5 | 13 | 5 | 42 | 103.5 | 7 | 38.5 |
| 2016 | 5 | 53.5 | 13 | 4.5 | 48.5 | 121.5 | 8 | 42 |
| 2017 | 5 | 55 | 14 | 5.5 | 62 | 155 | 8 | 46.5 |

Note: NRR is not included because currently there are no accredited NRR programs

Enrollment Comparison Between 2016 and 2017

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 fellow enrollment between 2016 and 2017 follows. As shown, except for AD and GN, all other subspecialties show an increase in first-year fill rates. The filled spots show a slight decrease from 2016 to 2017 for BNNP and CNMP, which is likely due to program attrition for BNNP and a program moving to inactive status for CNMP. No fellows enrolled in GN programs in 2017. Information for NRR is not provided because there are currently no accredited NRR programs to submit an annual report.



2016 and 2017 Available and Filled Fellowship Spots

Note: NRR is not included because currently there are no accredited NRR programs

Fellow Completion and Certification

Of the 1,060 graduates, 769 (72.5%) have pursued UCNS certification, with another 54 who have applied to take upcoming 2018/2019 examinations (AD, BNNP, HM, NI). If all candidates pass their respective certification examinations, the number of graduates who are certified will increase to 823 (78%). It is important to note that the 1,060 graduates include fellows who are not boarded through the American Board of Medical Specialty (ABMS) or Royal College of Physicians and Surgeons of Canada (RCPSC) and are not eligible for a UCNS certification examination (65), and those who have graduated from a subspecialty when no examination has been available (GN=3). Taking these graduates out increases the percentage certified to 77.5% 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, along with the overall year-end certification diplomate counts. The data provided in 2016 is also available for comparison. It is interesting to note that the data shows there is a significant portion of fellows who do not apply for the first available certification examination.

| | AD | BNNP | CNMP | GN | HM | NCC | NI | NO |
|--|-------|-------|-------|----|-------|-------|-------|-------|
| Total Graduates Through 2017 | 6 | 177 | 34 | 3 | 167 | 490 | 32 | 151 |
| Total Graduates Certified Through 2017 | 2 | 108 | 5 | 0 | 113 | 411 | 21 | 109 |
| 2018 Certification Applications | 1 | 23 | NA | NA | 28 | NA | 2 | NA* |
| Percent Certified | 33% | 61% | 15% | 0% | 68% | 84% | 66% | 72% |
| (% if all applicants pass) | (50%) | (74%) | | | (84%) | | (72%) | |
| Total Graduates Through 2016 | 5 | 153 | 26 | 2 | 140 | 402 | 28 | 128 |
| Total Percent Certified Reported in 2016 | 40% | 67% | 23% | 0% | 79% | 70% | 75% | 66% |
| (with applicants) | | | (38%) | | | (89%) | | (79%) |

Graduates Seeking Certification

Note: NRR is not included because currently there are no accredited NRR programs

*The NO certification application period began in 2018 for the 2019 examination. Results will be reported in 2019.

| Subspecialty | 2015 Yr End Diplomates | 2016 Yr End Diplomates | 2017 Yr End Diplomates | 2018 Yr End Diplomates |
|--|------------------------------|------------------------------|------------------------------|------------------------------|
| Neurocritical Care | 1,241 | 1,240 | 1,374 | 1,337 |
| Headache Medicine | 520 | 523 | 484 | 570 |
| Behavioral Neurology & Neuropsychiatry | 388 | 403 | 382 | 407 |
| Neuro-oncology | 207 | 207 | 240 | 236 |
| Clinical Neuromuscular Pathology | 35 | 43 | 59 | 59 |
| Autonomic Disorders | 27 | 38 | 37 | 48 |
| Neuroimaging | 180 | 180 | 206 | 187 |
| Geriatric Neurology | 18 | 18 | 18 | 18 |
| Neural Repair and Rehabilitation | 23 | 23 | 23 | 23 |
| TOTALS | 2,639 | 2,675 | 2,823 | 2,885 |

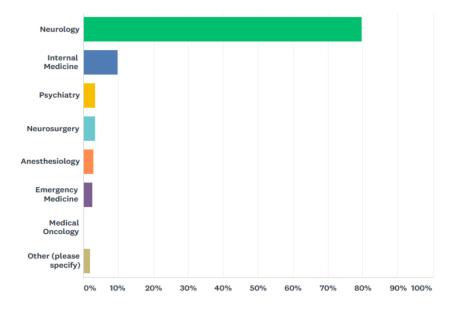
Year-End Diplomate Counts by Subspecialty

FELLOWSHIP EVALUATION SURVEY

From May 30 through June 29, 2018, UCNS surveyed 270 of 290 fellows completing a UCNS-accredited fellowship. Fellows with "bad" or no email addresses comprised the 20 not receiving the survey invitation. Reminder emails for those who did not complete the survey were sent June 6, June 13, June 15, and June 20. Emails were also sent to program directors and program coordinators asking them to encourage their fellows to complete the survey. A reminder email was sent to program directors and coordinators with fellows who had not yet completed the survey on June 13. Responses from 203 fellows were collected, of which 200 completed the survey. Fellows from 105 programs responded. The highest number of responders identified as fellows enrolled in an NCC program (119), followed by NO (28), HM (23), BNNP (19), CNMP (10), NI (4), and AD (1). No responses from GN or NRR fellows were received. It should be noted that one fellow identified as being enrolled in both an NCC and a BNNP program, so the responses to this question total 204.

Fellows were next asked to identify their primary specialty. The information identified closely aligns with the information received in the annual reports. The majority of the respondents reported being primarily certified in

Neurology (162), followed by the specialties identified in the following chart. "Other" is comprised of critical care medicine (2), epilepsy (1), and family medicine (1).



One hundred thirty-eight fellows reported being enrolled in their first year, 63 in their second year, and two in the third year of their fellowship, with 116 graduating in 2018.

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

Q7 There is administrative support available to me.

| | Alisweleu. 200 Skipped. 3 | |
|----------------|---------------------------|-----|
| ANSWER CHOICES | RESPONSES | |
| Yes | 98.50% | 197 |
| No | 1.50% | 3 |
| TOTAL | | 200 |

Q8 Faculty in my fellowship provide appropriate supervision for my clinical work (neither too little nor too much).

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. .

| | Answered: 200 Skipped: 3 | |
|----------------|--------------------------|-----|
| ANSWER CHOICES | RESPONSES | |
| Always | 76.00% | 152 |
| Usually | 22.50% | 45 |
| Rarely | 1.50% | 3 |
| Never | 0.00% | 0 |
| TOTAL | | 200 |

Q9 Faculty members are interested in my fellowship education.

Answered: 200 Skipped: 3

| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| Always | 74.50% | 149 |
| Usually | 24.50% | 49 |
| Rarely | 1.00% | 2 |
| Never | 0.00% | 0 |
| TOTAL | | 200 |

Q10 I am able to review all of my performance evaluations.

Answered: 200 Skipped: 3

| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| Always | 79.00% | 158 |
| Usually | 15.00% | 30 |
| Rarely | 4.00% | 8 |
| Never | 2.00% | 4 |
| TOTAL | | 200 |

Q11 I evaluate program faculty at least once per year.

Answered: 200 Skipped: 3

| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| Yes | 91.00% | 182 |
| No | 9.00% | 18 |
| TOTAL | | 200 |

Q12 I evaluate the program at least once per year.

| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| Yes | 95.00% | 190 |
| No | 5.00% | 10 |
| TOTAL | | 200 |

Q13 The program director treats my evaluations of faculty and the program as confidentially as possible.

Answered: 200 Skipped: 3

| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| Always | 84.50% | 169 |
| Usually | 14.00% | 28 |
| Rarely | 0.50% | 1 |
| Never | 1.00% | 2 |
| TOTAL | | 200 |

Q14 Fellow feedback is and has been used to help improve the program.

Answered: 200 Skipped: 3

| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| Always | 63.50% | 127 |
| Usually | 27.50% | 55 |
| Rarely | 0.50% | 1 |
| Never | 1.00% | 2 |
| Unknown | 7.50% | 15 |
| TOTAL | | 200 |

Q15 Feedback provided to me is timely.

| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| Always | 70.50% | 141 |
| Usually | 27.00% | 54 |
| Rarely | 1.50% | 3 |
| Never | 1.00% | 2 |
| TOTAL | | 200 |

Q16 Feedback provided to me has helped direct my learning.

Answered: 200 Skipped: 3

| ANSWER CHOICES | RESPONSES | |
|------------------------------|-----------|-----|
| Always | 68.00% | 136 |
| Usually | 28.00% | 56 |
| Rarely | 3.50% | 7 |
| Never | 0.00% | 0 |
| I have not received feedback | 0.50% | 1 |
| TOTAL | | 200 |

Q17 I have opportunities to participate in research and other scholarly activity.

Answered: 200 Skipped: 3

| ANSWER CHOICES | RESPONSES | |
|----------------------------|-----------|-----|
| Strongly agree | 76.50% | 153 |
| Agree | 20.00% | 40 |
| Neither agree nor disagree | 3.50% | 7 |
| Disagree | 0.00% | 0 |
| Strongly disagree | 0.00% | 0 |
| TOTAL | | 200 |

Q18 My education has not been compromised by service requirements. Service is defined as activities that should be routinely performed by nonphysicians, such as routine transportation of patients and routine phlebotomy. Taking care of patients and documentation are education and not service.

| ANSWER CHOICES | RESPONSES | |
|----------------------------|-----------|-----|
| Strongly agree | 76.50% | 153 |
| Agree | 19.00% | 38 |
| Neither agree nor disagree | 2.50% | 5 |
| Disagree | 1.00% | 2 |
| Strongly disagree | 1.00% | 2 |
| TOTAL | | 200 |

Q19 The variety of patients in my program is comprehensive for my fellowship field.

Answered: 200 Skipped: 3

| ANSWER CHOICES | RESPONSES | |
|----------------------------|-----------|-----|
| Strongly agree | 76.00% | 152 |
| Agree | 20.00% | 40 |
| Neither agree nor disagree | 3.00% | 6 |
| Disagree | 0.50% | 1 |
| Strongly disagree | 0.50% | 1 |
| TOTAL | | 200 |

Q20 Patient handovers are very effective in my program.

|--|

| ANSWER CHOICES | RESPONSES | |
|----------------------------|-----------|-----|
| Strongly agree | 51.00% | 102 |
| Agree | 31.00% | 62 |
| Neither agree nor disagree | 5.50% | 11 |
| Disagree | 0.50% | 1 |
| Strongly disagree | 0.50% | 1 |
| Not applicable | 11.50% | 23 |
| TOTAL | | 200 |

Q21 My education has not been compromised by too many other trainees (i.e., residents, medical students, allied health, etc.)

| ANSWER CHOICES | RESPONSES | |
|----------------------------|-----------|-----|
| Strongly agree | 74.50% | 149 |
| Agree | 21.00% | 42 |
| Neither agree nor disagree | 2.00% | 4 |
| Disagree | 1.00% | 2 |
| Strongly disagree | 1.50% | 3 |
| TOTAL | | 200 |

Q22 I can raise concerns to my program director, department, or graduate medical education leadership without fear of reprisal.

Answered: 200 Skipped: 3

| ANSWER CHOICES | RESPONSES | |
|----------------------------|-----------|-----|
| Strongly agree | 75.50% | 151 |
| Agree | 20.00% | 40 |
| Neither agree nor disagree | 3.50% | 7 |
| Disagree | 0.50% | 1 |
| Strongly disagree | 0.50% | 1 |
| TOTAL | | 200 |

Q23 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: 200 Skipped: 3

| ANSWER CHOICES | RESPONSES | |
|----------------------------|-----------|-----|
| Strongly agree | 68.50% | 137 |
| Agree | 25.00% | 50 |
| Neither agree nor disagree | 4.00% | 8 |
| Disagree | 2.00% | 4 |
| Strongly disagree | 0.50% | 1 |
| TOTAL | | 200 |

Q24 In my program, I participate in interprofessional teams in patient management.

| ANSWER CHOICES | RESPONSES | |
|----------------------------|-----------|-----|
| Strongly agree | 79.50% | 159 |
| Agree | 19.50% | 39 |
| Neither agree nor disagree | 1.00% | 2 |
| Disagree | 0.00% | 0 |
| Strongly disagree | 0.00% | 0 |
| TOTAL | | 200 |

Q25 There are didactics specifically for the fellow(s) in my fellowship specialty in my program.

Answered: 200 Skipped: 3

| ANSWER CHOICES | RESPONSES | |
|----------------------------|-----------|-----|
| Strongly agree | 60.00% | 120 |
| Agree | 29.00% | 58 |
| Neither agree nor disagree | 7.00% | 14 |
| Disagree | 3.50% | 7 |
| Strongly disagree | 0.50% | 1 |
| TOTAL | | 200 |

Q26 In my program, there are systems in place for me to transition care to another provider if I am too fatigued.

Answered: 200 Skipped: 3

| ANSWER CHOICES | RESPONSES | |
|----------------------------|-----------|-----|
| Strongly agree | 54.00% | 108 |
| Agree | 31.00% | 62 |
| Neither agree nor disagree | 11.50% | 23 |
| Disagree | 2.50% | 5 |
| Strongly disagree | 1.00% | 2 |
| TOTAL | | 200 |

Q27 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.

| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| Yes | 98.50% | 197 |
| No | 1.50% | 3 |
| TOTAL | | 200 |

Q28 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.

Answered: 200 Skipped: 3

| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| Always | 59.00% | 118 |
| Usually | 4.50% | 9 |
| Rarely | 1.00% | 2 |
| Never | 1.00% | 2 |
| Not applicable | 34.50% | 69 |
| TOTAL | | 200 |

Q29 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: 200 Skipped: 3

| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| Always | 69.00% | 138 |
| Usually | 5.00% | 10 |
| Rarely | 1.50% | 3 |
| Never | 0.00% | 0 |
| Not applicable | 24.50% | 49 |
| TOTAL | | 200 |

Q30 I have at least eight hours off between work duty periods.

| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| Always | 91.00% | 182 |
| Usually | 8.00% | 16 |
| Rarely | 1.00% | 2 |
| Never | 0.00% | 0 |
| TOTAL | | 200 |

Q31 At-home call includes telemedicine or remote monitoring.

Answered: 200 Skipped: 3

| ANSWER CHOICES | RESPONSES | |
|------------------------|-----------|-----|
| Yes | 21.00% | 42 |
| No | 28.50% | 57 |
| Not applicable | 51.50% | 103 |
| Total Respondents: 200 | | |

Total Respondents: 200

Q32 I am included in the process of reviewing the goals and objectives of the fellowship.

Answered: 200 Skipped: 3

| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| Yes | 87.50% | 175 |
| No | 12.50% | 25 |
| TOTAL | | 200 |

Q33 Do you have any concerns about your program?

Answered: 200 Skipped: 3

| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| Yes | 9.00% | 18 |
| No | 91.00% | 182 |
| TOTAL | | 200 |

Q35 On a scale of one to five, with five being the best, how would you rate your fellowship experience?

| | | | | Answered | : 200 Skipp | ed: 3 | | |
|---|------------|------------|------------|--------------|-------------|-------------|------------------|------|
| | 1 | 2 | 3 | 4 | 5 | TOTAL | WEIGHTED AVERAGE | |
| ☆ | 1.50% 3 | 0.50% 1 | 4.50% 9 | 25.50% 51 | 68.00 1 | % 36 200 | | 4.58 |

Q36 My program has prepared me for independent practice in my subspecialty.

Answered: 200 Skipped: 3

| ANSWER CHOICES | RESPONSES | |
|-------------------------------|-----------|-----|
| Yes | 82.50% | 165 |
| No | 2.00% | 4 |
| I am not graduating this year | 15.50% | 31 |
| TOTAL | | 200 |

Q37 I plan to take the UCNS certification examination in my subspecialty (must be taken within four years of graduation).

| Answered: | 200 | Skipped: | 3 |
|-----------|-----|----------|---|
| | | | |

| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| Yes | 97.50% | 195 |
| No | 2.50% | 5 |
| TOTAL | | 200 |

Q38 Please notify me regarding including my subspecialty's certification examination and other UCNS information:

| Answered: | 200 | Skipped: | 3 | |
|-----------|-----|----------|---|--|
|-----------|-----|----------|---|--|

| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| Yes | 83.50% | 167 |
| No | 16.50% | 33 |
| TOTAL | | 200 |

Analysis and Outcomes

The 70% (n=203) response rate exceeded initial expectations, providing UCNS with a solid foundation of data to begin monitoring outcomes thresholds. One hundred five programs were represented, with only 30 programs that 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. One hundred sixty-five of 169 fellows indicated that they felt their training program prepared them for independent practice in the subspecialty, with 31 (15.5%) indicating they would not be graduating this year. Only four fellows felt that their experience in the program did not prepare them for independent practice in the subspecialty. In addition, fellows were asked to rate their fellowship experience on a scale of one to five, with five being the best. The weighted average was 4.58, with 136 rating 5, 51 rating 4, nine rating 3, one rating 2, and three rating 1.

When asked about taking the UCNS certification within four years of graduation, all but five respondents indicated that they would be seeking UCNS certification in the future. The reasons given for not seeking certification are largely due to certification eligibility, with one physician citing the potential for seeking ABPN NCC certification instead.

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 that show a trend of negative responses or who do not meet other identified benchmarks will trigger a comprehensive review. Other outcomes that will be tracked by UCNS include fellow recruitment, fellow graduation and attrition, fellow performance on certification examinations, and milestone submission (once implemented).

SUBSPECIALTY-SPECIFIC STATISTICS

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 and 2017 are also provided. Because currently there are no NRR programs accredited, a summary for NRR is not provided.

Autonomic Disorders | First program accredited in 2013

Accreditation

Fellowships

Currently Accredited: 5 | Attrition: 1 (2013) Program Construction: 1 year (4); 1 or 2 years (1) Departments: All programs located within neurology departments Program Director Specialty: Neurology (4); Internal Medicine (1)

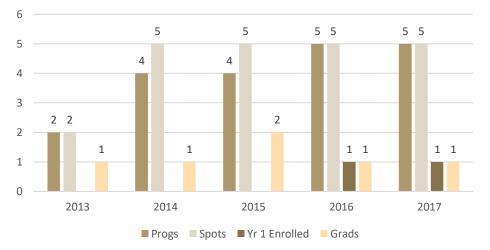
Fellows

Graduates: 6 | UCNS Certified: 2 (1 application for 2018 exam)

Primary Specialty: Neurology (5); Family Medicine (1) | ABMS/RCPSC: ABMS (5)

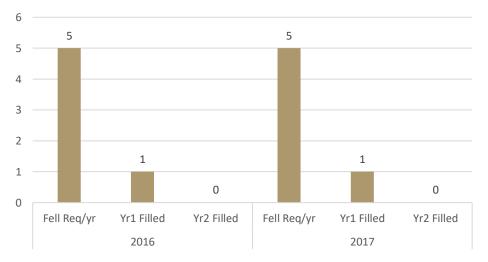
Enrollment

2016 Approved Spots: 5 | 2016 Filled: 1 2017 Approved Spots: 5 | 2017 Filled: 1



AD Program Growth

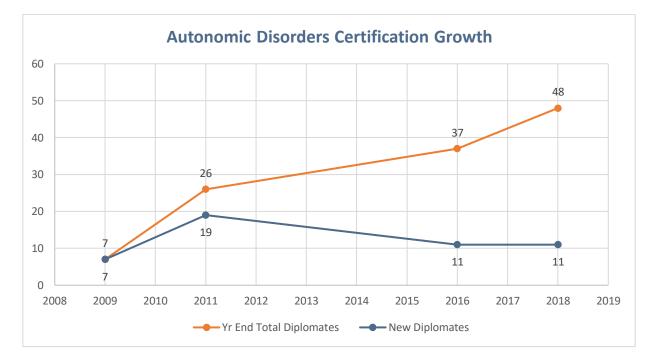




Diplomates

•

- 48 certified Autonomic Disorders diplomates
- Eligibility pathways:
 - o Graduated from UCNS-accredited accredited training program
 - Practice track
 - Extended to 2020 due to exam being on hold from 2012 to 2015
 - Examination took place in 2018
 - 11 approved applications received
 - o 100% pass rate



Certification Examination Pass Rates

| Subspecialty | Year | Fellow Pass Rate | Non-Fellow Pass Rate |
|---------------------|------|---------------------|-------------------------|
| Autonomic Disorders | 2016 | 100% | 90% |
| | 2018 | 100% | 100% |

Behavioral Neurology & Neuropsychiatry | First program accredited in 2006

Accreditation

Fellowships

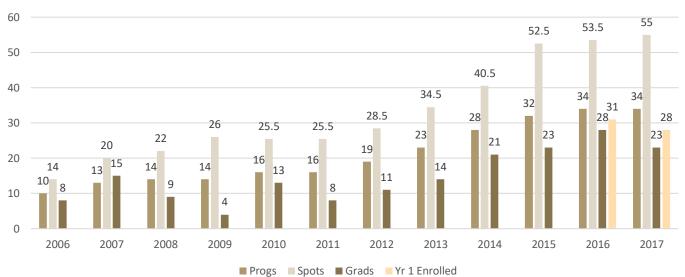
Currently Accredited: 34 | Attrition: 3 (2009, 2010, 2016) Program Construction: 1 year (13); 2 years (4); 1 or 2 years (16); 1, 2, or 3 years (1) Departments: Neurology (28); Psychiatry (6) Program Director Specialty: Neuro (24); Neuro/Internal Med (1); Neuro/Psych (5); Psych (4)

Fellows

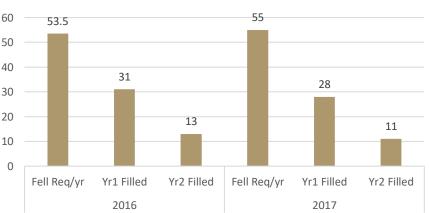
Graduates: 177 | UCNS Certified: 108 (23 applications for 2018 exam) Primary Specialty: Neuro (120); Psychiatry (53); Internal Med (3); Neuro/Psych (1) | ABMS/RCPSC: ABMS (161); RCPSC (10)

Enrollment

2016 Approved Spots: 53.5 | 2016 Filled: Year 1 (31); Year 2 (13) 2017 Approved Spots: 55 | 2017 Filled: Year 1 (28); Year 2 (11)



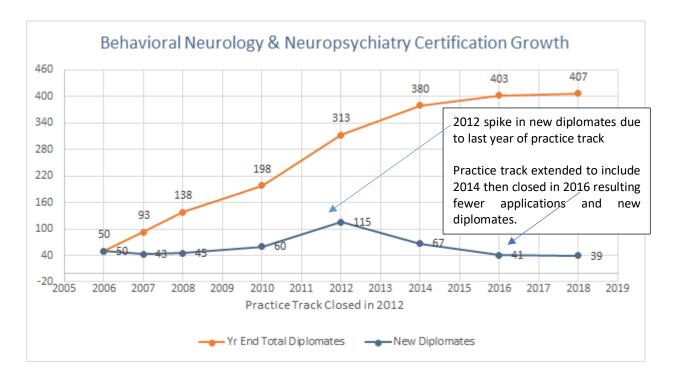
BNNP Program Growth



2016-2017 Fellow Enrollment

Diplomates

- <u>407 certified Behavioral Neurology and Neuropsychiatry diplomates</u>
- Eligibility pathways:
 - Graduated from UCNS-accredited accredited training program
 - Faculty diplomates
 - Program directors of UCNS-accredited programs are required to be certified
 - Pathway is for faculty if practice track is closed
 - Practice track currently closed
 - Originally available through 2012
 - Subspecialty requested and was granted an extension for 2014 examination
 - Practice track not available for 2016 or 2018 examinations
- Next examination scheduled in 2020



Certification Pass Rates

| Subspecialty | Year | Fellow Pass Rate | Non- Fellow Pass Rate |
|---|------|---------------------|-----------------------------|
| Behavioral Neurology & Neuropsychiatry | 2014 | 97% | 61% |
| | 2016 | 94% | 50% |
| | 2018 | 94% | 60% |

Clinical Neuromuscular Pathology | First program accredited in 2013

Accreditation

Fellowships

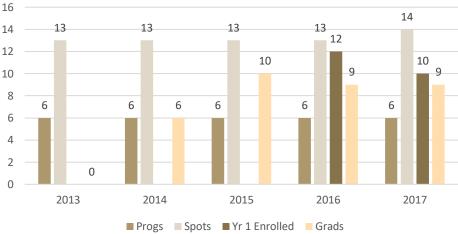
Currently Accredited: 6 | Attrition: 0 Program Construction: 1 year (5); 1 or 2 years (1) Departments: All programs located within neurology departments Program Director Specialty: Neurology (6)

Fellows

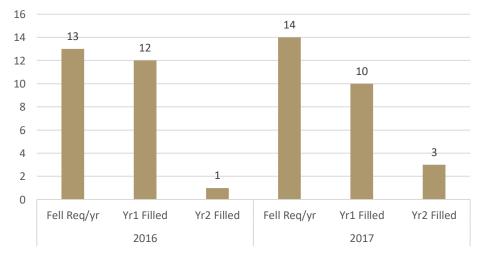
Graduates: 34 | UCNS Certified: 13

Primary Specialty: Neurology (33); Pediatrics (1) | ABMS/RCPSC: ABMS (26); RCPSC (2) 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)



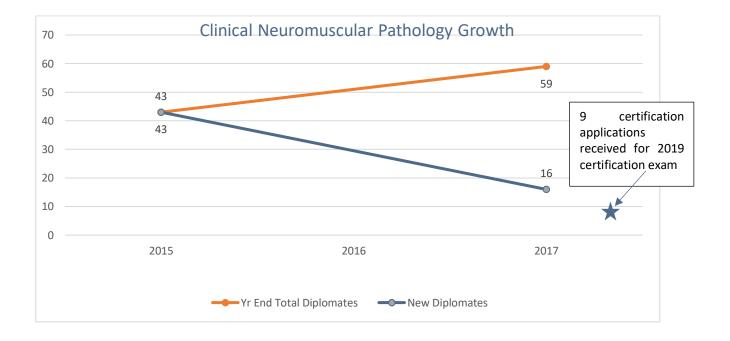
CNMP Program Growth



2016-2017 Fellow Enrollment

Diplomates

- <u>59 certified Clinical Neuromuscular Pathology diplomates</u>
- Eligibility pathways:
 - o Graduated from UCNS-accredited accredited training program
 - Practice track
 - Available through 2021
- 2019 examination registration period open November 1, 2018 February 15, 2019
- Only 5 applications received as of January 30th
- Examination scheduled for September 16 20, 2019



Certification Pass Rates

| Subspecialty | Year | Fellow Pass Rate | Non-Fellow Pass Rate |
|----------------------------------|------|---------------------|-------------------------|
| | 2015 | 86% | 94% |
| Clinical Neuromuscular Pathology | 2017 | 80% | 100% |

Geriatric Neurology | First program accredited in 2010

Accreditation

Fellowships

Currently Accredited: 5 | Attrition: 2 (2015) Program Construction: 1 year (3); 1 or 2 years (1); 2 or 3 years (1) Departments: All programs located within neurology departments Program Director Specialty: Neurology (5)

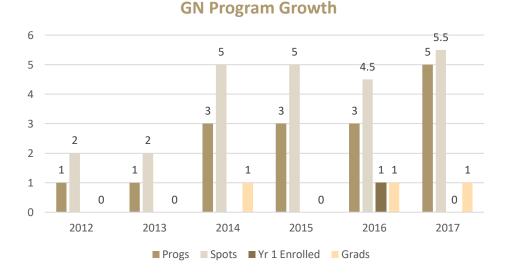
Fellows

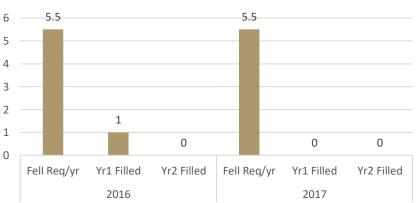
Graduates: 3

UCNS Certified: 0 (a UCNS examination has not been offered since fellows have graduated) Primary Specialty: Neurology (3) | ABMS/RCPSC: ABMS (2)

Enrollment

2016 Approved Spots: 5.5 | 2016 Filled: 1 2017 Approved Spots: 5.5 | 2017 Filled: 0





2016-2017 Fellow Enrollment

Diplomates

- <u>18 certified Geriatric Neurology diplomates</u>
 - \circ 6 certified in 2009
 - \circ 6 certified in 2011
 - \circ 6 certified via essay exam for participation on exam committee
- Eligibility pathways:
 - Graduated from UCNS-accredited training program
 - o Practice track
- Certification examination on hold due to low participation in 2009 and 2011.

Headache Medicine | First program accredited in 2007

Accreditation

Fellowships

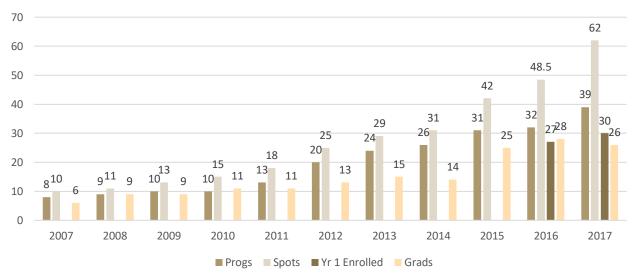
Currently Accredited: 41 | Attrition: 4 (2009, 2013, 2017 x2) Program Construction: 1 year (38); 1 or 2 years (3) Departments: Neurology (37); Pediatrics/Neurology (2); Pediatrics (2) Program Director Specialty: Neurology (37); Family Medicine (2); Pediatrics/Neurology (2)

Fellows

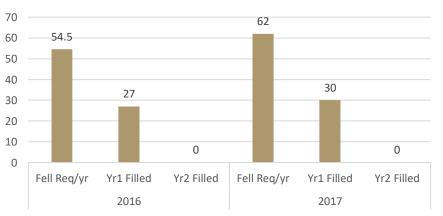
Graduates: 167 | UCNS Certified: 113 (28 applications for 2018 exam) Primary Specialty: Neuro (151); Family Med (5); Physiatry (3); Internal Med (2); Pediatrics (2); Psych (2); Ophthalmology (1); Dentistry (1) | ABMS/RCPSC: ABMS (151); RCPSC (3)

Enrollment

2016 Approved Spots: 54.5 | 2016 Filled: Year 1 (27); Year 2 (0) 2017 Approved Spots: 62 | 2017 Filled: Year 1 (30); Year 2 (0)



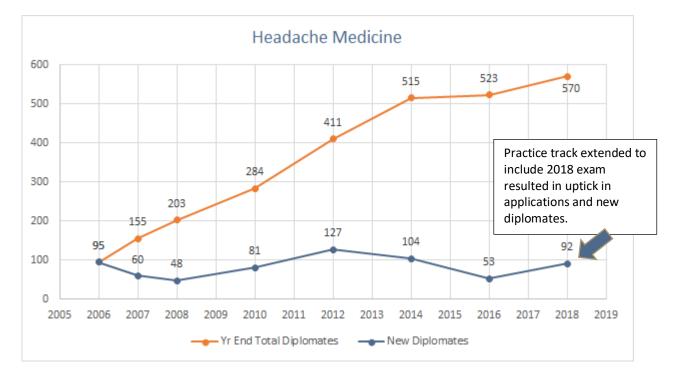
HM Program Growth



2016-2017 Fellow Enrollment

Diplomates

- <u>570 certified HM diplomates</u>
- 102 approved applications for 2018 initial certification examination; 45 approved applications for recertification examination
- Next examination will take place in 2020
- Eligibility pathways:
 - o Graduated from UCNS-accredited accredited training program or
 - o Practice track



Certification Pass Rates

| Subspecialty | Year | Fellow Pass Rate | Non-Fellow Pass Rate |
|-------------------|------|---------------------|-------------------------|
| Headache Medicine | 2014 | 100% | 83% |
| | 2016 | 96% | 82% |
| | 2018 | 96% | 83% |

Neurocritical Care | First program accredited in 2008

Accreditation

Fellowships

Currently Accredited: 69 | Attrition: 0

Program Construction: 2 years (32); 1 or 2 years (37) – post-graduate critical care medicine training (12); post-graduate neurosurgery (2); both (23)

Departments: Neuro (51); NS (11); Anesth (3); CCM (2); Emer Med (1); Infectious Disease (1) Program Director Specialty: Neuro (57); Emer Med (5); Neuro/IM (3); IM (2); NS (1); Anesth (1)

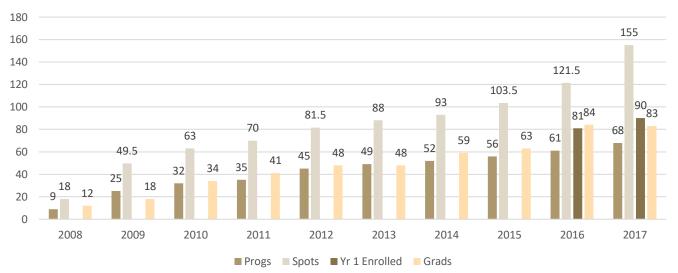
Fellows

Graduates: 490 | UCNS Certified: 411

Primary Specialty: Neuro (387); IM (43); EM (28); IM/Neuro (12); Anesth (9); NS (8); Radiology (1); Family Medicine (1); Anesth/IM (1) | ABMS/RCPSC: ABMS (466); RCPSC (0)

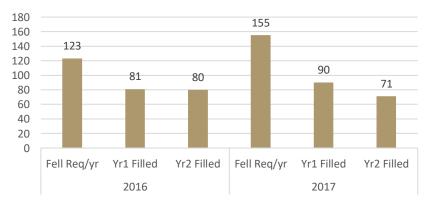
Enrollment

2016 Approved Spots: 123 | 2016 Filled: Year 1 (81); Year 2 (80) 2017 Approved Spots: 155 | 2017 Filled: Year 1 (90); Year 2 (71)



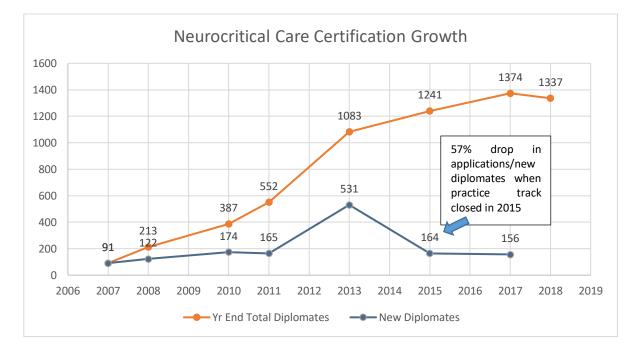
NCC Program Growth

2016-2017 Fellow Enrollment



Diplomates

- <u>1337 Neurocritical Care diplomates</u>
- Eligibility pathways:
 - o Graduated from UCNS-accredited accredited training program
 - o Faculty diplomates
 - Program directors of UCNS-accredited programs are required to be certified
 - This is pathway is for faculty if practice track is closed
 - Practice track closed after 2013 exam
- 2018 recertification examination took place December 9-13
- 2019 initial certification examination scheduled for December



Certification Pass Rates

| Subspecialty | Year | Fellow Pass Rate | Non-Fellow Pass Rate |
|--------------------|------|---------------------|-------------------------|
| Neurocritical Care | 2013 | 94% | 73% |
| | 2015 | 96% | 47% |
| | 2017 | 86% | 51% |

Neuroimaging | First program accredited in 2009

Accreditation

Fellowships

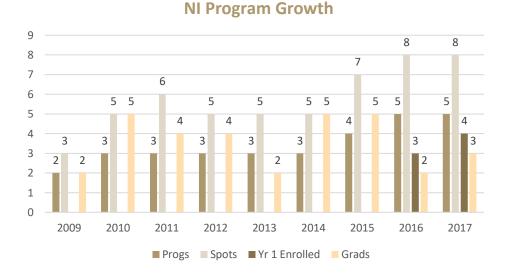
Currently Accredited: 5 | Attrition: 1 (2013) Program Construction: All five programs are one-year in duration Departments: Neurology (4); Internal Medicine (1) Program Director Specialty: All five program directors are neurologists

Fellows

Graduates: 32 | UCNS Certified: 21 (2 applications for 2018 exam)

Primary Specialty: Neurology (31); Unknown (1) | ABMS/RCPSC: ABMS (29); Unknown (1) Enrollment

2016 Approved Spots: 8 | 2016 Filled: 3 2017 Approved Spots: 8 | 2017 Filled: 4

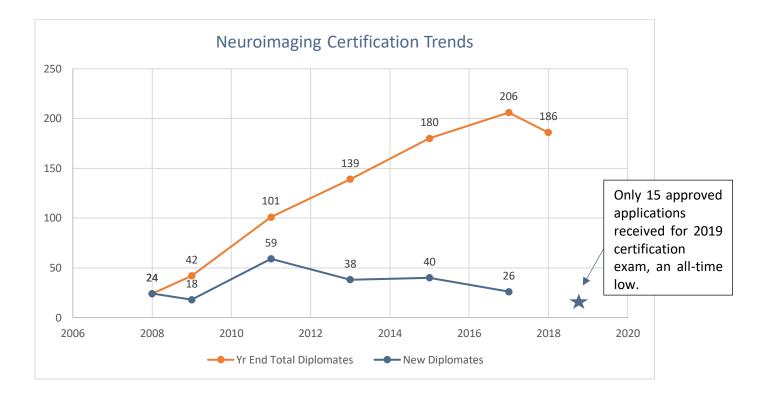


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2016-2017 Fellow Enrollment

Diplomates

- <u>186 Neuroimaging diplomates</u>
- Eligibility pathways:
 - \circ $\;$ Graduated from UCNS-accredited accredited training program
 - Practice track
 - Was available through 2013
 - Subspecialty requested and was granted extensions through 2019
- 2019 examination took place January 28- February 1



Certification Pass Rates

| Subspecialty | Year | Fellow Pass Rate | Non-Fellow Pass Rate | |
|---|------|---------------------|-------------------------|--|
| Neuroimaging | 2015 | 90% | 86% | |
| | 2017 | 100% | 84% | |
| NOTE: Data collection started in 2013; Non-fellow category includes practice track, retests, and faculty diplomate candidates | | | | |

Neuro-oncology | First program accredited in 2008

Accreditation

Fellowships

Currently Accredited: 32 | Attrition: 1 (2015)

Program Construction: 1 year (8); 2 years (6); 1 or 2 years (15); 1, 2, or 3 years (3)

Departments: Neurology (26); Neurosurgery (6)

Program Director Specialty: Neurology (29); Internal Med (1); Medical Oncology (1); Neuro/Pediatrics (1)

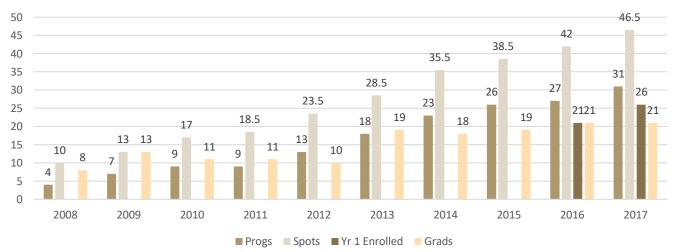
Fellows

Graduates: 151 | UCNS Certified: 109

Primary Specialty: Neuro (135); IM/Hem-Onc (12); NS (2); Peds (2); Psych/Neuro (1) | ABMS/RCPSC: ABMS (138); RCPSC (2)

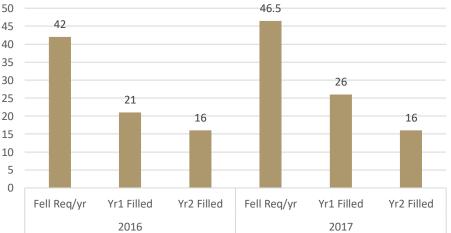
Enrollment

2016 Approved Spots: 42 | 2016 Filled: Year 1 (21); Year 2 (16) 2017 Approved Spots: 46.5 | 2017 Filled: Year 1 (26); Year 2 (16)



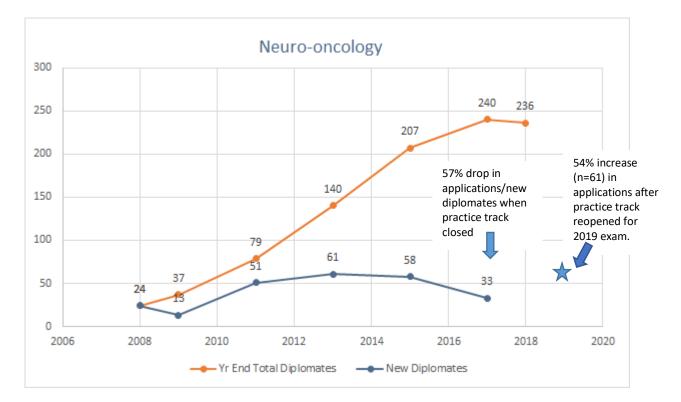
NO Program Growth





Diplomates

- <u>236 certified NO diplomates</u>
- Eligibility pathways:
 - Graduated from UCNS-accredited accredited training program
 - Faculty diplomates
 - Program directors of UCNS-accredited programs are required to be certified
 - This is pathway is for faculty if practice track is closed
 - Practice track currently open
 - Was available through 2013
 - Subspecialty requested and was granted an extension for 2015 examination
 - Practice track extension were not requested for 2017
 - Subspecialty requested and was granted an extension for 2019 and 2021 examinations
- 2019 examination scheduled for August 12-16



Certification Pass Rates

| Subspecialty | Year | Fellow Pass Rate | Non-Fellow Pass Rate | |
|---|------|---------------------|-------------------------|--|
| Neuro-oncology | 2015 | 89% | 76% | |
| | 2017 | 83% | 67% | |
| NOTE: Data collection started in 2013; Non-fellow category includes practice track, retests, and faculty diplomate candidates | | | | |