2022-2023 Accreditation Annual Report



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United Council for Neurologic Subspecialties

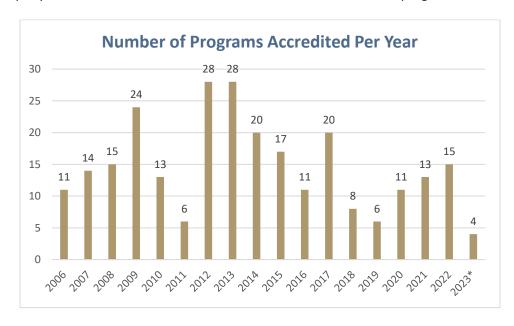
March 2024

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, 2023, unless otherwise noted, for the subspecialties of Autonomic Disorders (AD), Behavioral Neurology & Neuropsychiatry (BNNP), Clinical Neuromuscular Pathology (CNMP), Geriatric Neurology (GN), Headache Medicine (HM), Interventional Neurology (IN), Neurocritical Care (NCC), Neuroimaging (NI), and Neuro-oncology (NO) for programs accredited as of October 1, 2023. The Neural Repair and Rehabilitation (NRR) subspecialty sunset in 2019. The newest subspecialty, Neonatal Neurocritical Care (NNCC) began accrediting programs in 2023. Data for the NRR and NNCC subspecialties are not provided unless noted during total historical program counts.

PROGRAM GROWTH AND ATTRITION

Since 2006, UCNS has accredited 264 programs in ten neurologic subspecialties. As of October 1, 2023, 233 programs are accredited in nine subspecialties representing 38 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 182 of the 233 programs are located within neurology departments. Program leadership (program directors and department chairs) are predominantly neurology based (84% and 78% respectively), with a specific breakdown included in the subspecialty-specific section later in this report. As of October 1, 2023, the growth in the number of accredited programs in all currently recognized subspecialties per year is shown in the chart below. The chart does not include program attrition.



^{*}Additional programs will be reviewed during fall meeting for accreditation December 1

GROWTH PER YEAR PER SUBSPECIALTY

The number of programs accredited per year per subspecialty varies. The table below illustrates the growth per year, per subspecialty, without attrition. NNCC is not included as accreditation in that subspecialty was not offered until fall 2023.

Accredited Program Growth by Year Per Subspecialty

(Does not include attrition)

Year	AD	BNNP	CNMP	GN	HM	IN	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
2022	1	2	0	0	5	6	0		0	1	15
2023*					2	1	1				4
Total	8	51	6	7	60	7	78	2	6	39	264

^{*}Additional programs will be reviewed during fall meeting for accreditation December 1

The following table illustrates the trend in program growth among subspecialties from 2018 through 2022. Half of the subspecialties saw an overall growth in the number of programs from 2017 to 2021. Two subspecialties saw an overall loss and two subspecialties remained stagnant.

Five-Year Accreditation Growth Trend for Accredited Programs

(Total programs by subspecialty by year)

						Five-Year Change
Subspecialty	2018	2019	2020	2021	2022	#
AD	5	4	5	5	5	0
BNNP	35	37	37	44	46	11
CNMP	6	6	6	6	6	0
GN	5	4	4	4	4	-1
HM	42	43	45	47	51	9
IN	NA	NA	NA	NA	6	6
NCC	69	69	73	76	76	7
NI	5	4	4	4	4	-1
NO	34	35	36	37	36	2

[^]NRR subspecialty sunset in 2019

ATTRITION PER YEAR PER SUBSPECIALTY

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 October 1, 2023, UCNS has lost 31 programs to attrition since 2006, with an 88% overall retention rate. The retention rate continues to decrease slightly (91% 2020-2021 and 90% 2021-2022), largely due to an increase in the number of withdrawing NCC programs (five programs have withdrawn accreditation since 2022). A more specific breakdown by year of loss and subspecialty is shown below.

Year	Programs Accredited Each Year	Program Attrition Each Year	Cumulative Total Programs
2006	11	0	11
2007	14	0	25
2008	15	0	40
2009	24	2 (-1 HM, -1 BNNP)	62
2010	13	1 (-1 BNNP)	74
2011	6	0	80
2012	28	0	108
2013	28	3 (-1 AD, -1 HM, -1 NI)	133
2014	20	0 3	153
2015	17	(-1 NO, -2 GN)	167
2016	11	1 (-1 BNNP)	177
2017	20	2 (-2 HM)	195
2018	8	2 (-2 NRR)	201
2019	6	5 (-1 AD, -1, GN, -1 HM, -1 NCC, -1 NI)	202
2020	11	3 (-2 BNNP, -1 HM)	210
2021	13	0	223
2022	15	4 (-1 HM, -1 NCC, -2 NO)	234
2023*	4	5 (-4 NCC, -1 AD)	233
Total	264	31	233

^{*}Additional programs will be reviewed during fall meeting for accreditation December 1

INACTIVE STATUS

Programs may voluntarily choose *Inactive Status* at any time for a period of not more than two years, renewable once. Programs with this status must submit their annual fees, but do not need to submit an annual report or reaccreditation application while inactive. Programs also may not enroll a fellow while inactive. To "reactivate" a program must submit a reaccreditation application.

The table below shows how many programs are inactive in each subspecialty.

Subspecialty	Number of Inactive Programs
AD	0
BNNP	0
CNMP	0
GN	1
HM	3
IN	0
NCC	1
NI	0
NO	3

FELLOWS

Of the programs remaining accredited since 2006, a total of 1,924 physicians have filled 4,211 first-year fellowship spots and have graduated from the current UCNS-accredited programs through 2022. 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 (873) followed by HM (348), BNNP (304), NO (260), CNMP (82), NI (40), AD (11), GN (3), and IN (3). It is important to note that IN accredited its first programs in 2022.

Of the 1,924 graduates, 1,544 are neurologists. An additional 10 reported they are neurologist/internists, two pediatric/neurologist, and five psychiatrist/neurologists, which means 81% of UCNS graduates have a primary certification in neurology, down a percentage point since last year. A specific breakdown of the other specialties represented in each subspecialty may be found in the subspecialty-specific section of the report. Thirty-eight program graduates are certified in Canada by the Royal College of Physicians and Surgeons of Canada (RCPSC), 11 by the American Osteopathic Association (AOA), and 1,770 are boarded by an American Board of Medical Specialties (ABMS) 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. Historically, most programs offered a one-year program option only; however, over the last three years, one- or two- year programs have become more common. Ninety-four programs offer one- or two-year options and 87 offer only a single-year option. The remaining program options include two years (42) and a handful of programs offering up to three years (10). Most programs (n=104) 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 233 programs accredited as of October 1, 2023, including inactive programs, as well as the number of fellowship spots approved per

subspecialty by year. 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/Fellowship Spots Approved							
Programs	Approved Fellowship Spots	Programs	Approved Fellowship Spots				
104	1	1	3.5				
4	1.5	5	4				
81	2	2	4.5				
3	2.5	4	5				
25	3	4	6				

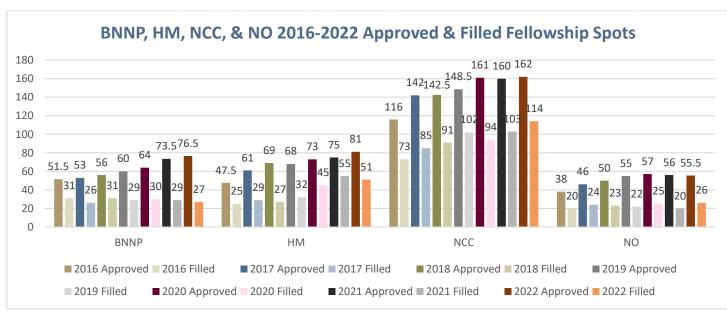
Available Fellowship Spots by Year by Subspecialty

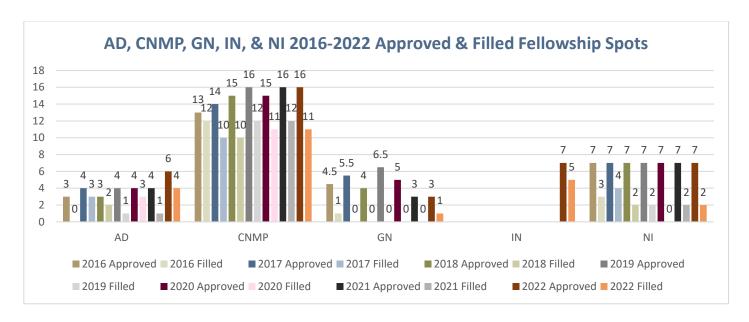
Year	AD	BNNP	CNMP	GN	HM	IN	NCC	NI	NO
2006		22							
2007		26			19				
2008		27			21		30		13
2009		27			23		68	3	17
2010		30			23		82	3	22
2011		30			29		86	5	22
2012		34		3	37		110.5	5	27
2013	1	41	16	3	45		120	5	33
2014	2	47	16	4	48		124	5	39
2015	2	53	16	4	57		120.5	7	40
2016	3	51.5	13	4.5	47.5		116	7	38
2017	3	53	14	5.5	61		142	7	46
2018	3	56	15	4	69		142.5	7	50
2019	4	60	16	6.5	68		148.5	7	55
2020	4	64	15	5	73		161	7	57
2021	4	73.5	16	3	75		160	7	56
2022	6	76.5	16	3	81	7	162	7	55.5
TOTAL	32	771.5	153	45.5	776.5	7	1773	82	570.5

Enrollment Comparisons: 2016, 2017, 2018, 2019, 2020, 2021, and 2022

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, 2020, 2021, and 2022 follows. As shown, fellow fill rates fluctuate. Some of the historical fluctuation may be attributed to fellow attrition. There is a fellow enrolled in a GN program for the first time since 2016. No fellows were enrolled in the first year of a NI program in 2020. It is important to once again note that these enrollment numbers account only for fellows enrolled in Year 1 as a second-year fellow was enrolled in NI in 2020. IN is included for the first time since the subspecialty accredited its first programs in 2022. Programs in an inactive status do not show as available spots in the tables below, which accounts for some of the decrease in available fellowship positions. Programs lost to attrition are not included.







Fellow Completion and Certification

Of the 1,924 graduates, 64% (n=1,240) have gone on to pursue UCNS certification, which is consistent with last year. A decrease in the percentage of certification in previous years is largely associated with the decrease in the number of NCC graduates seeking to certify in NCC by UCNS, which is described in greater detail below. Fifty-one graduates have applied to take upcoming 2023 examinations in CNMP, NCC, and NO. If all candidates pass their respective certification examinations, the number of graduates who are certified will increase to 1,291 (67%). It is important to note that the 1,924 graduates include fellows who are not certified through the American Board of Medical Specialty (ABMS), RCPSC, or AOA and are not eligible for a UCNS certification examination (106). Also included are those who have graduated from a subspecialty when no examination has been available (GN=3). Removing these graduates increases the percentage certified to 68% 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 and includes data from 2020 and 2021 for comparison. As a reminder, examinations are offered every other year so percentages for each subspecialty may dip from year to year. It is interesting to note that, while not illustrated in the following table, the data shows there is a significant number of fellows who do not apply for the first available certification examination after their graduation.

Graduates Seeking Certification

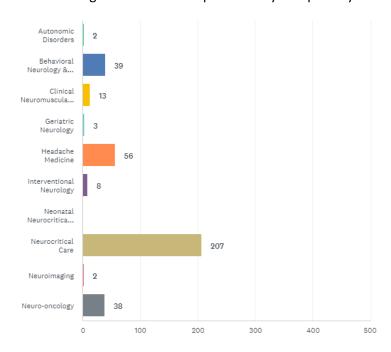
	AD	BNNP	CNMP	GN	НМ	IN	NCC	NI	NO
Total Graduates Through 2022	11	304	82	3	248	3	873	40	260
Total Graduates Certified Through 2022	8	208	27	0	280	0	494	27	196
Certification Applications	NA	NA	5	NA	NA	NA	25	NA	21
Percent Certified			33%				57%		75%
(% if all applicants pass)	73%	68%	(39%)	0%	89%	0%	(59%)	68%	(83%)
Total Graduates Through 2020	7	247	60	3	248	NA	683	38	218
Total Percent Certified in 2020	71%	74%	38%	0%	83%	NA	71%	71%	81%
Total Graduates Through 2021	10	274	72	3	295	NA	779	39	235
Total Percent Certified in 2021	80%	72%	38%	0%	83%	NA	63%	69%	81%

FELLOWSHIP EVALUATION SURVEY

Introduction

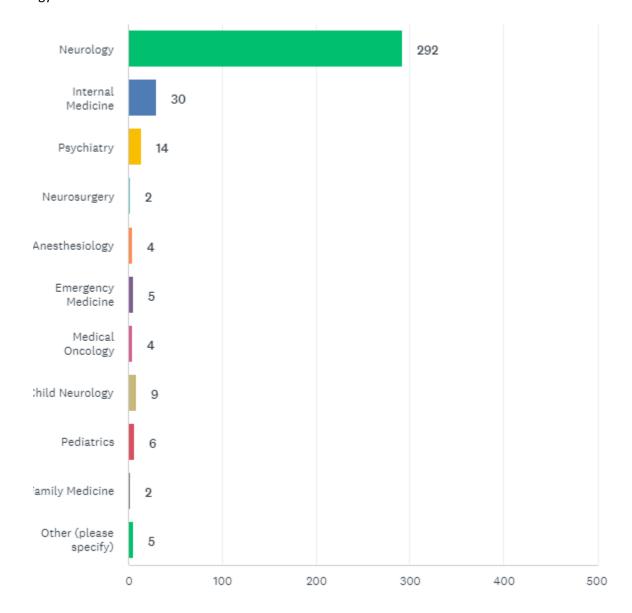
From May 30 through June 30, 2023, UCNS surveyed 388 fellows enrolled in a UCNS-accredited fellowship. Eleven fellows with undeliverable email addresses were unable to receive the survey invitation. Reminder emails for those who did not complete the survey were sent periodically during the collection 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 365 fellows were collected. Fellows from 156 of the 158 programs with self-reported enrolled fellows responded.

The following illustrates the respondents by subspecialty:



Two of the three fellows who indicated enrollment in a GN also indicated enrollment in a BNNP program. The program those fellows are enrolled in is only accredited as BNNP.

Fellows were next asked to identify their primary specialty. Most of the respondents reported being primarily certified in Neurology (258), followed by the specialties identified in the following chart. "Other" is comprised of one each of critical care medicine, geriatric, PCC, neurosurgery, pediatric oncology, and pediatric neuro-oncology.



A total of 230 fellows reported being enrolled in their first year, 1128 in their second year, and seven in the third year of their fellowship, with 225 graduating in 2023.

Two hundred five fellows reported being enrolled in their first year, 115 in their second year, and five in the third year of their fellowship, with 196 graduating in 2022.

Demographic Information

UCNS fellows were next asked a series of demographic information including age, gender, and ethnicity.

Your age

Answered: 365 Skipped: 0

ANSWER CHOICES	•	RESPONSES	•
▼ 20-30		7.40%	27
▼ 31-40		87.12%	318
▼ 41-50		4.66%	17
▼ 51-60		0.27%	1
▼ 61+		0.00%	0
▼ I prefer not to answer		0.55%	2
TOTAL			365

Your gender

Answered: 365 Skipped: 0

ANSWER CHOICES	•	RESPONSES	~
▼ Female		41.92%	153
▼ Male		56.16%	205
▼ Nonbinary		0.00%	0
▼ Transgender		0.27%	1
▼ I prefer not to answer		1.64%	6
▼ Other (please specify)	esponses	0.00%	0
TOTAL			365

Your ethnicity

ANSWER CHOICES ▼	RESPONSES	•
▼ Asian	31.78%	16
▼ Black or African American	4.66%	17
▼ Caucasian	43.84%	60
▼ Latinx	7.67%	28
▼ Native Hawaiian or Pacific Islander	0.00%	0
▼ Native American or Indigenous Peoples	0.00%	0
▼ I prefer not to answer	12.05%	44
TOTAL	36	65

Compliance with the Program Requirements

Fellows were 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: 365 Skipped: 0



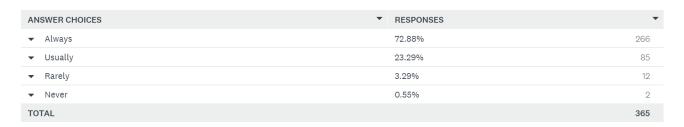
Faculty in my fellowship provide appropriate supervision for my clinical work (neither too little nor too much).

Answered: 365 Skipped: 0



Faculty members are interested in my fellowship education.

Answered: 365 Skipped: 0



I am able to review all of my performance evaluations.



I evaluate program faculty at least once per year.

Answered: 365 Skipped: 0

ANSWER CHOICES ▼	RESPONSES	•
▼ Yes	89.59%	327
▼ No	10.41%	38
TOTAL		365

I evaluate the program at least once per year.

Answered: 365 Skipped: 0

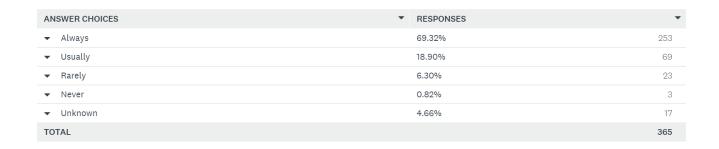
ANSWER CHOICES ▼	RESPONSES	•
▼ Yes	93.42%	341
▼ No	6.58%	24
TOTAL		365

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

Answered: 365 Skipped: 0

ANSWER CHOICES	▼ RESPONSES	•
▼ Always	87.67%	320
▼ Usually	8.77%	32
▼ Rarely	1.37%	5
▼ Never	2.19%	8
TOTAL		365

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



Feedback provided to me is timely.

Answered: 365 Skipped: 0

ANSWER CHOICES	▼ RESPONSES	•
▼ Always	67.40%	246
▼ Usually	25.21%	92
▼ Rarely	5.75%	21
▼ Never	1.64%	6
TOTAL		365

Feedback provided to me has helped direct my learning.

Answered: 365 Skipped: 0

ANSWER CHOICES	▼ RESPONSES	▼
▼ Always	70.41%	257
▼ Usually	23.56%	86
▼ Rarely	3.84%	14
▼ Never	0.82%	3
▼ I have not received feedback	1.37%	5
TOTAL		365

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

ANSWER CHOICES	•	RESPONSES	•
▼ Strongly agree		70.96%	259
▼ Agree		24.93%	91
▼ Neither agree nor disagree		2.47%	9
▼ Disagree		1.37%	5
▼ Strongly disagree		0.27%	1
TOTAL			365

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: 365 Skipped: 0

ANSWER CHOICES	▼ RESPONSES	▼
▼ Strongly agree	73.15%	267
▼ Agree	16.71%	61
▼ Neither agree nor disagree	4.66%	17
▼ Disagree	3.56%	13
▼ Strongly disagree	1.92%	7
TOTAL		365

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

Answered: 365 Skipped: 0

ANSWER CHOICES	▼ RESPONSES	*
▼ Strongly agree	78.90%	288
▼ Agree	18.08%	66
▼ Neither agree nor disagree	1.92%	7
▼ Disagree	1.10%	4
▼ Strongly disagree	0.00%	0
TOTAL		365

Patient handovers are very effective in my program.

ANSWER CHOICES	RESPONSES	~
▼ Strongly agree	54.79%	200
▼ Agree	27.67%	101
▼ Neither agree nor disagree	4.66%	17
▼ Disagree	2.19%	8
▼ Strongly disagree	0.55%	2
▼ Not applicable	10.14%	37
TOTAL		365

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

Answered: 365 Skipped: 0



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

Answered: 365 Skipped: 0

ANSWER CHOICES	▼ RESPONSES	•
▼ Strongly agree	69.59%	254
▼ Agree	19.18%	70
▼ Neither agree nor disagree	6.30%	23
▼ Disagree	2.74%	10
▼ Strongly disagree	2.19%	8
TOTAL		365

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.



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

Answered: 365 Skipped: 0

ANSWER CHOICES	•	RESPONSES	•
▼ Strongly agree		82.19%	300
▼ Agree		15.62%	57
▼ Neither agree nor disagree		1.64%	6
▼ Disagree		0.27%	1
▼ Strongly disagree		0.27%	1
TOTAL			365

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

Answered: 365 Skipped: 0



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



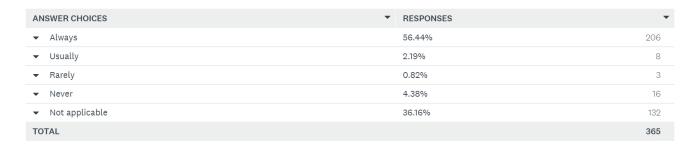
I work less than an average of 80 hours a week averaged over four weeks and have one day off in seven days averaged over four weeks.

Answered: 365 Skipped: 0



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: 365 Skipped: 0



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.



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

Answered: 365 Skipped: 0



At-home call includes telemedicine or remote monitoring.

Answered: 365 Skipped: 0



Comments (64)

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



COVID-19

A series of questions were included 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: 365 Skipped: 0



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

Answered: 365 Skipped: 0



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

ANSWER CHOICES	•	RESPONSES	•
▼ Strongly agree		69.04%	252
▼ Agree		20.82%	76
▼ Neither agree nor disagree		5.21%	19
▼ Disagree		4.11%	15
▼ Strongly disagree		0.82%	3
TOTAL			365

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

Answered: 365 Skipped: 0

ANSWER CHOICES	•	RESPONSES	•
▼ Strongly agree		60.00%	219
▼ Agree		18.63%	68
▼ Neither agree nor disagree		20.27%	74
▼ Disagree		1.10%	4
▼ Strongly disagree		0.00%	0
TOTAL			365

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: 142 Skipped: 223

Fellow Concerns

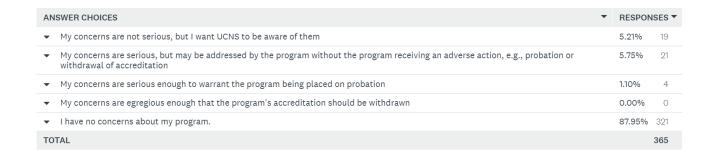
Fellows were next asked if they have any concerns about their program.

Do you have any concerns about your program?

Answered: 365 Skipped: 0



If yes, please indicate the following regarding your concern(s) (select one):



Conclusion

The survey is concluded by asking the fellow to rate the fellowship, as well as some additional general questions about the program and certification.

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

Answered: 365 Skipped: 0



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

Answered: 365 Skipped: 0



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

Answered: 365 Skipped: 0



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



Analysis

The 94% (n=365) response rate exceeded initial expectations, providing UCNS with a solid foundation of data to continue monitoring outcomes thresholds. A total of 156 programs were represented, with only two 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 seventy-six fellows indicated that they felt their training program prepared them for independent practice in the subspecialty, with 85 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 rated their fellowship experience on a scale of one to five, with five being the best. The weighted average was 4.51, with 237 rating 5, 92 rating 4, 25 rating 3, 8 rating 2, and 3 rating 1.

When asked about taking the UCNS certification within four years of graduation, 308 respondents indicated they would be pursuing UCNS certification in the future, with 57 of 365 respondents indicating they would not be seeking UCNS certification. Most of the NCC respondents cited the upcoming American Board of Medical Specialties 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.

COVID-19 appears to have a lesser impact on a fellow's educational experience than in previous years; however, evaluation results demonstrate that programs still affected have found ways to 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).

PROGRAM DIRECTOR SURVEY

Introduction

From August 25 through September 12, 2023, 225 program directors of active UCNS-accredited programs were surveyed. A total of 152 program directors participated while three program directors opted out of participating. The survey responses are summarized below. Narrative responses are not provided.

The table below shows the number of program directors in each subspecialty and the number of participants. As shown, all subspecialties were represented that currently have accredited programs. NNCC was included as an option, but no programs are yet accredited in the subspecialty.

Subspecialty	Number Invited	Number Responded (%)
AD	5	4 (80%)
BNNP	46	33 (72%)
CNMP	6	4 (67%)
GN	3	2 (67%)
HM	50	36 (72%)
IN	7	3 (43%)
NCC	71	47 (66%)
NI	4	4 (100%)
NNCC	NA	NA
NO	33	19 (58%)
Total	225	152 (68%)

Beginning in 2021, NCC training programs have the option to apply for accreditation through the Accreditation Council for Graduate Medical Education (ACGME). To gauge the intent of current UCNS-accredited NCC programs, NCC program directors were asked to identify the following with regards to ACGME NCC accreditation:

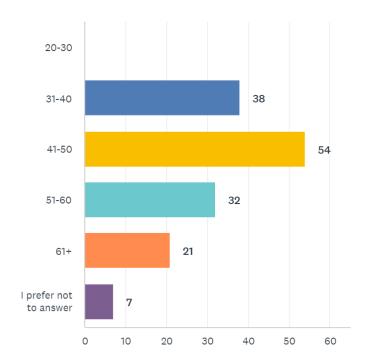
ANSWER CHOICES	▼ RESPONSES	•
▼ My program is also accredited by ACGME.	38.30%	18
▼ I intend to seek ACGME accreditation for my program.	51.06%	24
▼ I plan to maintain UCNS accreditation and ACGME accreditation.	55.32%	26
▼ I do not plan to maintain UCNS accreditation.	4.26%	2
▼ I do not plan to seek ACGME accreditation.	6.38%	3
Total Respondents: 47		

Demographic Information

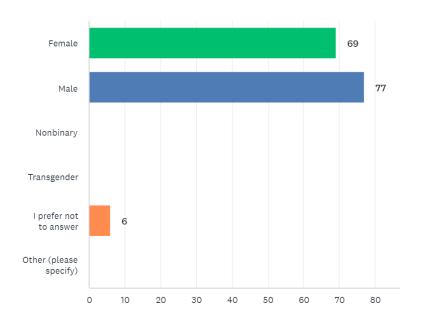
Program directors were next asked a series of demographic questions.

Your age

Answered: 152 Skipped: 0

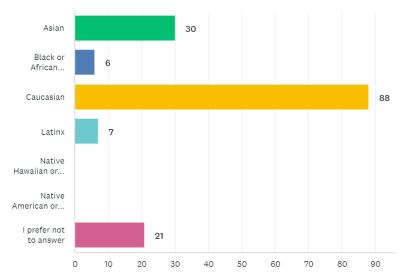


Your gender



Your ethnicity

Answered: 152 Skipped: 0



Program Requirements

Program directors were next asked a series of questions regarding potential discussions that may occur during the upcoming five-year review of the common program requirements: presence and role of an associate/assistant program director, program director protected time, and presence and protected time for administrative support.

Does your program include an associate/assistant program director?

Answered: 152 Skipped: 0



If your program includes an associate/assistant program director, please indicate which of the following describes their role:



Does at least one program coordinator support your program?

Answered: 152 Skipped: 0



If your program includes at least one program coordinator supporting your program, how much of their time is protected for program support?

Answered: 152 Skipped: 0

ANSWER CHOICES ▼	RESPONSES	•
▼ 1-10%	40.13%	61
▼ 11-20%	23.03%	35
▼ 21-30%	15.13%	23
▼ 31-40%	3.29%	5
▼ 41-50%	5.92%	9
▼ More than 50%	5.92%	9
▼ Do not have a program coordinator supporting the program	6.58%	10
TOTAL		152

Is your time as Program Director protected?



If Program Director time is protected, how much time is protected for program administration?

Answered: 152 Skipped: 0

ANSWER CHOICES	▼ RESPONSES	•
▼ 1-10%	40.79%	62
▼ 11-20%	17.76%	27
▼ 21-30%	3.95%	6
▼ 31-40%	0.00%	0
▼ 41-50%	0.00%	0
▼ More than 50%	0.00%	0
▼ Program Director time is not protected	37.50%	57
TOTAL	1	52

Feedback

Program directors were next asked to identify how their programs are funded.

How is your fellowship funded? (Check all that apply)

Answered: 152 Skipped: 0

ANSWER CHOICES	•	RESPONSES	•
▼ Institutional support		78.29%	119
▼ Fellow service		13.16%	20
▼ Outside grants/research funding		23.03%	35
▼ Other (please specify)	Responses	19.08%	29
Total Respondents: 152			

Program directors were asked to indicate their agreement with four statements regarding the new accreditation software, Zengine, and provided with an opportunity to provide comments.

•	STRONGLY DISAGREE	DISAGREE ▼	NEITHER AGREE NOR DISAGREE	AGREE ▼	STRONGLY _	TOTAL ▼	WEIGHTED AVERAGE
 I am aware that UCNS has transitioned to an online reporting platform, Zengine. 	6.71% 10	10.07% 15	22.82% 34	39.60% 59	20.81% 31	149	3.58
 I am comfortable using the Zengine platform. 	6.00% 9	11.33% 17	50.67% 76	19.33% 29	12.67% 19	150	3.21
 Zengine is more user friendly than previous submission methods. 	4.00% 6	6.67% 10	73.33% 110	10.00% 15	6.00% 9	150	3.07
 I would participate in online training provided by UCNS to better understand Zengine. 	3.33% 5	8.67% 13	36.67% 55	42.67% 64	8.67% 13	150	3.45
Comments (22)							

Programs were asked to indicate their agreement with seven statements regarding the value of accreditation and UCNS communications.

,	STRONGLY DISAGREE	DISAGREE ▼	NEITHER AGREE NOR ▼ DISAGREE	AGREE ▼	STRONGLY AGREE	TOTAL ▼	WEIGHTED AVERAGE
There is value to my UCNS accreditation.	1.32% 2	0.66%	5.26% 8	51.32% 78	41.45% 63	152	4.31
 UCNS accreditation assists me in recruitment of fellows. 	2.63% 4	3.95% 6	17.11% 26	44.08% 67	32.24% 49	152	3.99
 UCNS accreditation enables me to secure funding for my program. 	9.93% 15	17.22% 26	31.79% 48	28.48% 43	12.58% 19	151	3.17
 UCNS accreditation allows me to secure protected time for program administration. 	9.87% 15	24.34% 37	32.89% 50	23.68% 36	9.21% 14	152	2.98
 UCNS accreditation allows me to require administrative support. 	6.62% 10	17.88% 27	33.11% 50	35.10% 53	7.28% 11	151	3.19
 The UCNS accreditation process is user friendly. 	0.66%	8.55% 13	23.68% 36	52.63% 80	14.47% 22	152	3.72
 Communication is effective for receiving the accreditation information I need. 	0.00%	0.00%	11.84% 18	55.26% 84	32.89% 50	152	4.21

The final three questions centered around certification information sharing with fellows, resources programs would like to see developed, and an open-ended opportunity to share additional feedback.

Do you share UCNS certification information with your fellows?

Answered: 149 Skipped: 3



Are there any resources you would like UCNS to develop to facilitate the accreditation process?

Answered: 152 Skipped: 0



Comments (22)

Do you have any additional comments or suggestions you would like to share relating to UCNS accreditation?

Answered: 152 Skipped: 0

ANSWER CHOICES	▼ RESPONSES	~
▼ Yes	14.47%	22
▼ No	85.53%	130
TOTAL		152
Comments (24)		

Analysis

Six-eight percent of invited program directors participated in the survey, representing all subspecialties with accredited programs. Half of the responding NCC programs plan to maintain their UCNS accreditation at this time; however, as indicated later in comments, programs will continually reassess the issue as time progresses.

Most programs do not include an assistant/associate program director role within their programs. Those programs that do include this role use the assistant/associate program director for the purpose of administering the program.

The majority of programs do include program coordinator support for their programs; however, feedback provided indicated that required protected time would be beneficial. Program director time is also a major hurdle facing programs. More than half of the program directors indicate that program time is protected, but numerous program directors indicated a wish to require additional time to administer the programs. Thirty-seven percent of program directors indicate that their time is not protected and 41% indicate that only 1-10% of their time is protected.

In addition to program director and program coordinator protected time barriers, the other most commonly identified barriers to success are fellowship funding and fellow recruitment. Most fellowships are funded by institutional support, with grants/philanthropy and fellow service rounding out the majority of funding opportunities.

Feedback regarding the Zengine platform is mixed, with some positive feedback regarding its usability but comments indicate that there is still confusion about using the platform. Programs will benefit from increased communications/training.

Programs identify a perceived value to UCNS accreditation, with a weighted average of 4.31 out of 5; however, ratings are lower when asked if that value benefits programs for securing funding, administrative support, and recruitment. The majority of programs find the process to be user friendly and communications effective.

SUBSPECIALTY-SPECIFIC STATISTICS through October 1, 2023

For currently accredited programs in each subspecialty, the following information is provided:

Program Statistics

- Year programs were first accredited
- Current number of accredited programs
- Number of programs lost to attrition

Program Structure

- Duration
- Overseeing department
- Program director primary specialty

Graduate/Fellow Enrollment Information

- Number of graduates
- Number of graduates certified by UCNS
 - o Includes certification pass rates by year by subspecialty
- Graduates' primary specialties and ABMS/RCPSC eligibility are listed
- Approved and filled spots for 2016, 2017, 2018, 2019, 2021, 2022
 - Because NNCC did not begin accrediting programs until 2023, no statistics are provided for the subspecialty in the following subspecialty-specific updates

Subspecialty: Autonomic Disorders

First program accredited in 2013

Fellowships

Currently Accredited: 5 | Attrition: 3 (2013, 2019, 2023)

Program Construction: 1 year (5)

Departments: Neurology (4); Internal Medicine (1)

Program Director Specialty: Neurology (3); Internal Medicine (2)

Fellows

Graduates: 11 | UCNS Certified: 8

Primary Specialty: Neurology (9); Internal Medicine (2)

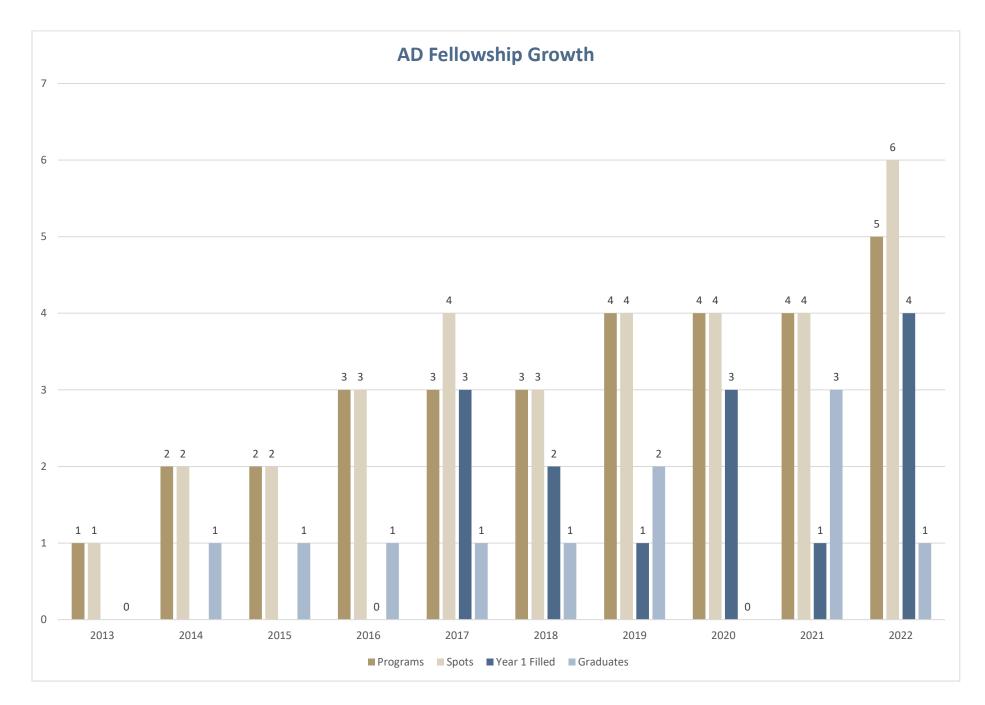
Primary Board Certification: ABMS (10)

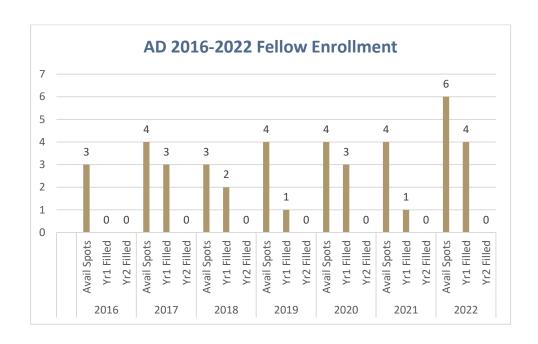
Certification Pass Rates (tracking began in 2014)

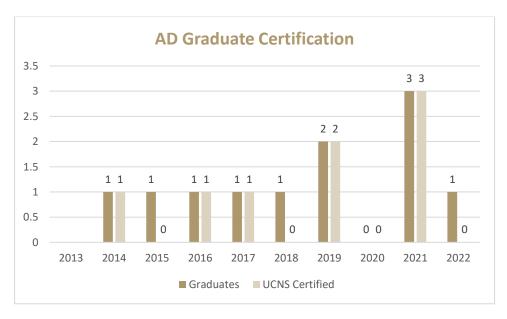
	Pass Rate		
Year	Fellow	Non-Fellow	
2016	100%	90%	
2018	100%	100%	
2020	100%	83%	
2022	100%	100%	

Enrollment

2016 Approved Spots: 3 | 2016 Filled: 0 2017 Approved Spots: 4 | 2017 Filled: 3 2018 Approved Spots: 3 | 2018 Filled: 2 2019 Approved Spots: 4 | 2019 Filled: 1 2020 Approved Spots: 4 | 2020 Filled: 3 2021 Approved Spots: 4 | 2021 Filled: 1 2022 Approved Spots: 6 | 2022 Filled: 4







Subspecialty: Behavioral Neurology & Neuropsychiatry

First program accredited in 2006

Fellowships

Currently Accredited: 46 | Attrition: 5 (2009, 2010, 2016, 2020 x 2)

Program Construction: 1 year (17); 2 years (3); 1 or 2 years (23); 1, 2, or 3 years (2); 2 or 3 years (1)

Departments: Neurology (33); Psychiatry (10); Neuro/IM (2); Neuro/ Psych (1)

Program Director Specialty: Neurology (32); Psychiatry (7); Neuro/Psych (4); Neuro/IM (1); Psych/IM (1)

Fellows

Graduates: 304 | UCNS Certified: 208

Primary Specialty: Neuro (201); Psychiatry (95); IM/Ger (3); IM (3); IM/Psych (1); Neuro/Psych (1) |

Primary Board Certification: ABMS (277); RCPSC (17); 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%	
2022	86%	72%	

Enrollment

2016 Approved Spots: 51.5 | 2016 Filled: Year 1 (31); Year 2 (12)

2017 Approved Spots: 53 | 2017 Filled: Year 1 (26); Year 2 (12)

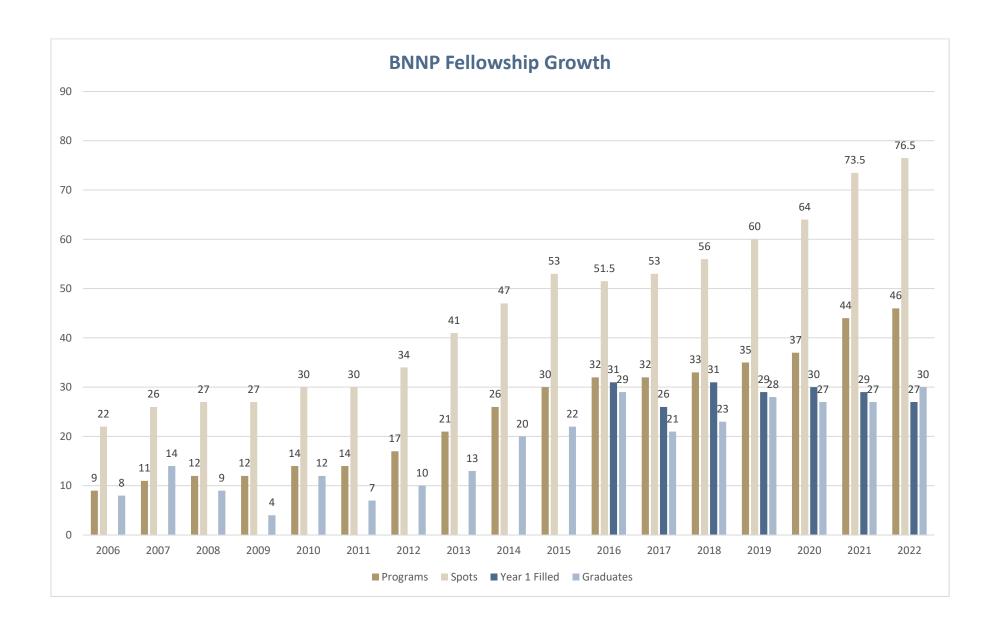
2018 Approved Spots: 56 | 2018 Filled: Year 1 (31); Year 2 (11)

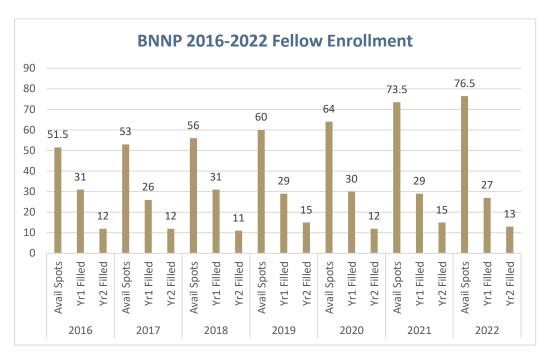
2019 Approved Spots: 60 | 2019 Filled: Year 1 (29); Year 2 (15)

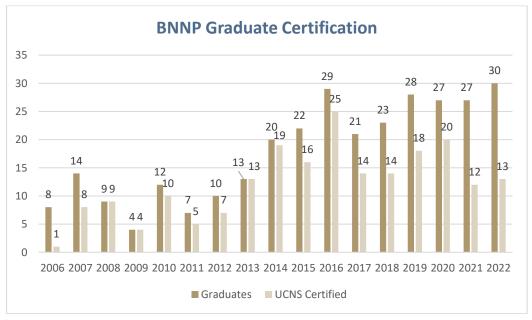
2020 Approved Spots: 64 | 2020 Filled: Year 1 (30); Year 2 (12)

2021 Approved Spots: 73.5 | 2021 Filled: Year 1 (29); Year 2 (15)

2022 Approved Spots: 76.5 | 2022 Filled: Year 1 (27); Year 2 (13)







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

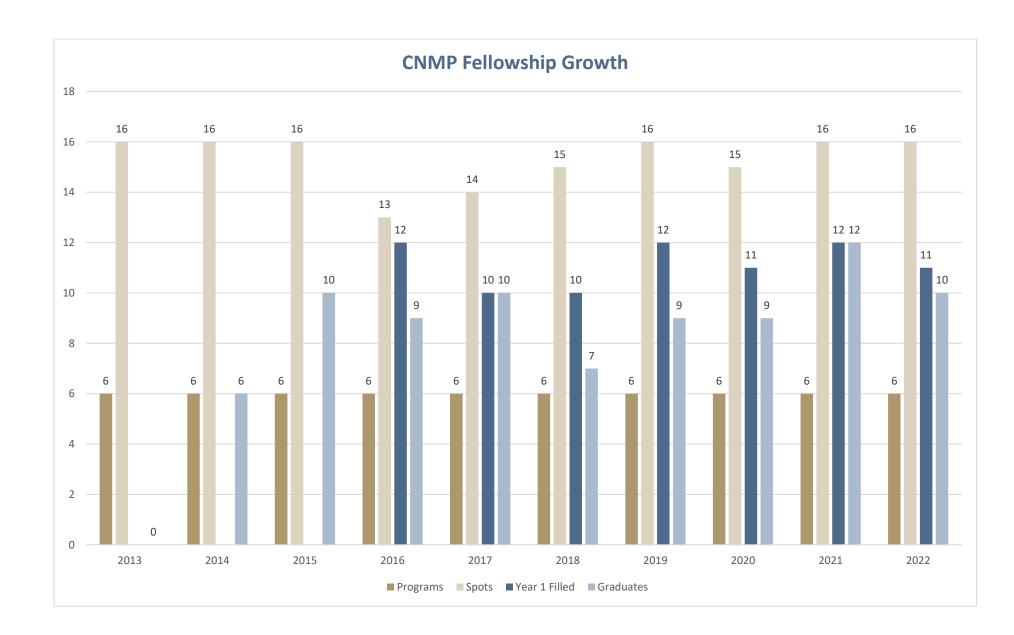
Graduates: 82 | UCNS Certified: 27 (5 applications received for 2023 examination)
Primary Specialty: Neurology (79); Child Neuro (2); Pediatrics (1)
Primary Board Certification: ABMS (64); RCPSC (6); AOA (0)

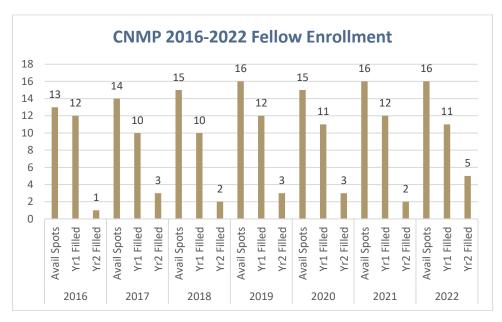
Certification Pass Rates (tracking began in 2014)

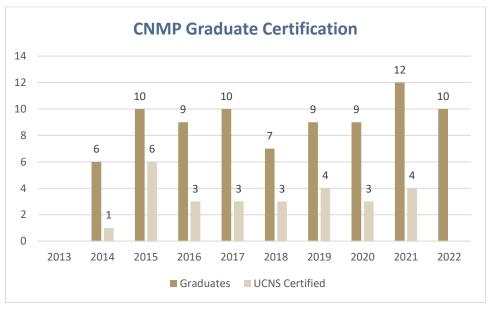
	Pass Rate	
Year	Fellow	Non-Fellow
2015	86%	94%
2017	80%	100%
2019	100%	100%
2021	100%	100%

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: 15 | 2018 Filled: Year 1 (10); Year 2 (2) 2019 Approved Spots: 16 | 2019 Filled: Year 1 (12); Year 2 (3) 2020 Approved Spots: 15 | 2020 Filled: Year 1 (11); Year 2 (3) 2021 Approved Spots: 16 | 2021 Filled: Year 1 (12); Year 2 (2) 2022 Approved Spots: 16 | 2022 Filled: Year 1 (11); Year 2 (3)
```







Subspecialty: Geriatric NeurologyFirst program accredited in 2010

Fellowships

Currently Accredited: 4 | Attrition: 3 (2015 x 2, 2019) | Inactive: 1 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

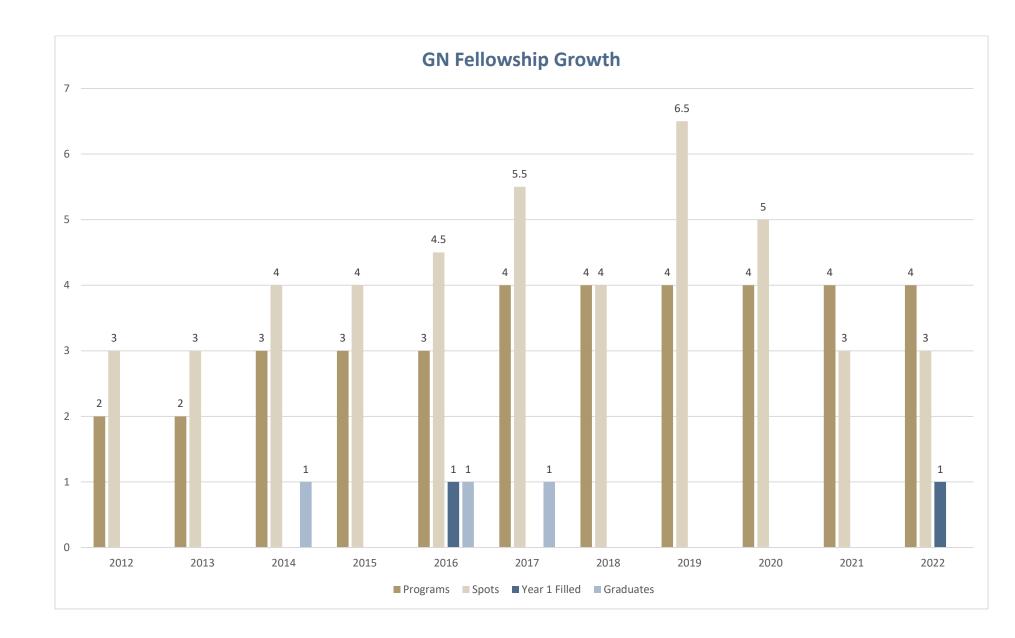
UCNS Certified: 0 (a UCNS examination has not been offered since fellows have graduated)

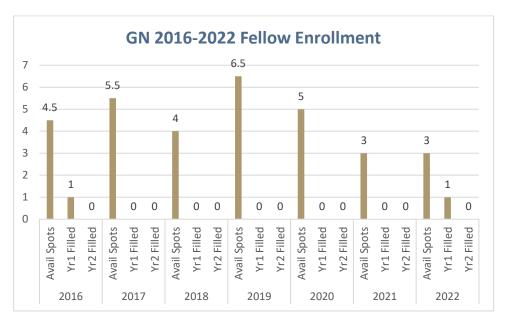
Primary Specialty: Neurology (3)

Primary Specialty: Neurology (3)
Primary Board Certification: ABMS (3)

Enrollment

2016 Approved Spots: 4.5 | 2016 Filled: 1 2017 Approved Spots: 5.5 | 2017 Filled: 0 2018 Approved Spots: 4 | 2018 Filled: 0 2019 Approved Spots: 6.5 | 2019 Filled: 0 2020 Approved Spots: 5 | 2020 Filled: 0 2021 Approved Spots: 3 | 2021 Filled: 0 2022 Approved Spots: 3 | 2022 Filled: 1







Subspecialty: Headache Medicine

First program accredited in 2007

Fellowships

Currently Accredited: 53 | Attrition: 7 (2009, 2013, 2017 x 2; 2019, 2020; 2022) | Inactive: 3

Program Construction: 1 year (47); 1 or 2 years (5); 1, 2, or 3 years (1)

Departments: Neuro (47); Peds (3); Peds/Neuro (2); Family Medicine (1)

Program Director Specialty: Neurology (48); Child Neuro (3); Peds/Neuro (1); Family Medicine (1)

Fellows

Graduates: 348 | UCNS Certified: 280

Primary Specialty: Neuro (303); Child Neuro (17); IM (10); Family Med (9); Physiatry (3); Peds (2); Psych (2); Ophthalmology (1); Dentistry (1)

Primary Board Certification: ABMS (317); RCPSC (8); AOA (5)

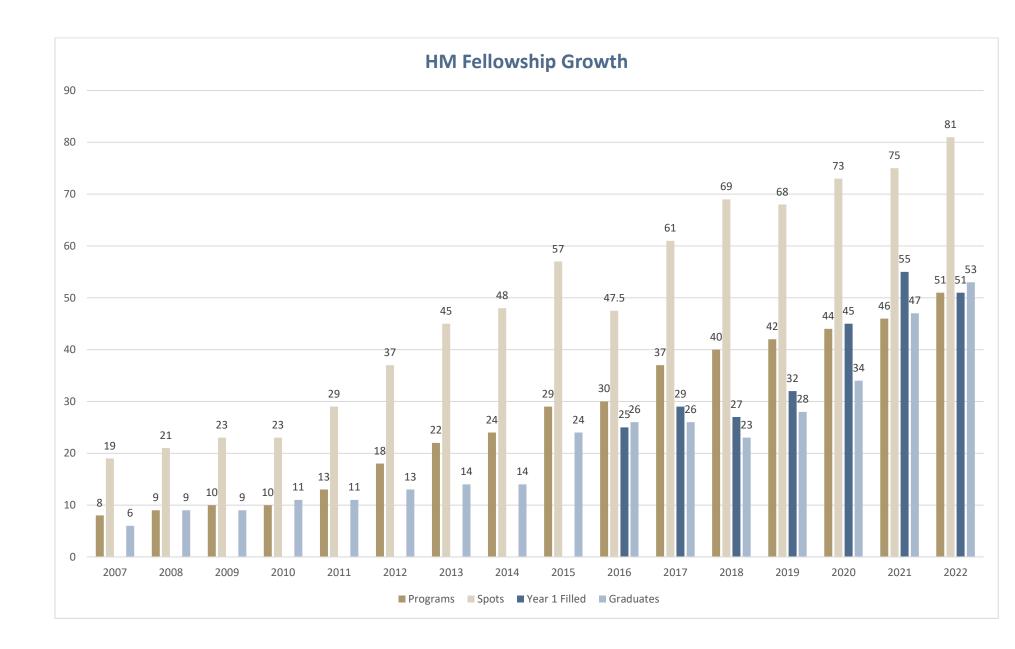
Certification Pass Rates (tracking began in 2014)

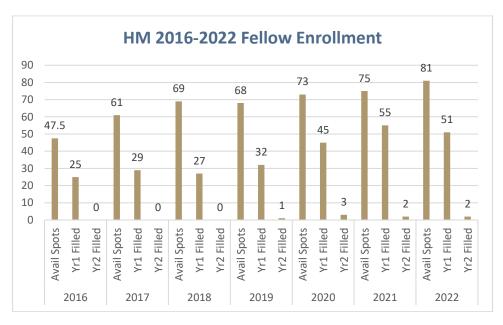
	Pass Rate	
Year	Fellow	Non-Fellow
2014	100%	83%
2016	96%	82%
2018	96%	83%
2020	98%	96%
2022	100%	96%

Enrollment

2016 Approved Spots: 47.5 | 2016 Filled: Year 1 (25); Year 2 (0) 2017 Approved Spots: 61 | 2017 Filled: Year 1 (29); Year 2 (0) 2018 Approved Spots: 69 | 2018 Filled: Year 1 (27); Year 2 (0) 2019 Approved Spots: 68 | 2019 Filled: Year 1 (32); Year 2 (1) 2020 Approved Spots: 73 | 2020 Filled: Year 1 (45); Year 2 (3)

2021 Approved Spots: 75 | 2021 Filled: Year 1 (55); Year 2 (2) 2022 Approved Spots: 81 | 2022 Filled: Year 1 (51); Year 2 (2)







Subspecialty: Interventional Neurology

First program accredited in 2022

Fellowships

Currently Accredited: 7 | Attrition: 0 Program Construction: 2 years (7) Departments: Neuro (6); Neurosurgery (1) Program Director Specialty: Neurology (7)

Fellows

Graduates: 3 | UCNS Certified: 0

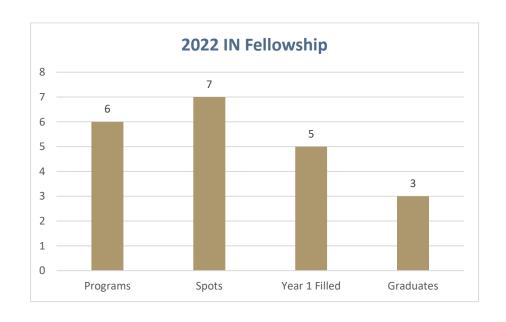
Primary Specialty: Neuro/Vascular Neuro (2); Neuro (1) Primary Board Certification: ABMS (3); RCPSC (0); AOA (0)

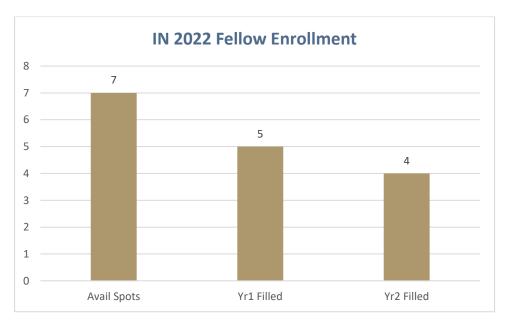
Certification Pass Rates (tracking began in 2014)

	Pass Rate	
Year	Fellow	Non-Fellow
2022	N/A	96%

Enrollment

2022 Approved Spots: 7 | 2022 Filled: Year 1 (5); Year 2 (4)







Subspecialty: Neurocritical Care First program accredited in 2008

Fellowships

Currently Accredited: 72 | Attrition: 2 (2019; 2022; 2023 x 4) | Inactive: 1
Program Construction: 2 years (26); 1 or 2 years (45); 1, 2, or 3 (1)
post-graduate critical care medicine training (13); post-graduate neurosurgery (3); both (30)
Departments: Neuro (50); NS (14); IM (4); CCM (3); Anesth (1)
Program Director Specialty: Neuro (60); Neuro/IM (5); IM (4); Emer Med (1); NS (1); Anesth (1)

Fellows

Graduates: 873 | UCNS Certified: 494 (25 applications received for 2023 examination)

Primary Specialty: Neuro (673); IM (92); EM (39); NS (30); Anesth (21); IM/Neuro (10); Surgery (2);

Family Med (1); Anesth/IM (1); IM/CCM (1); Peds/Neuro (2); Pulm (1); Vas Sur (1)

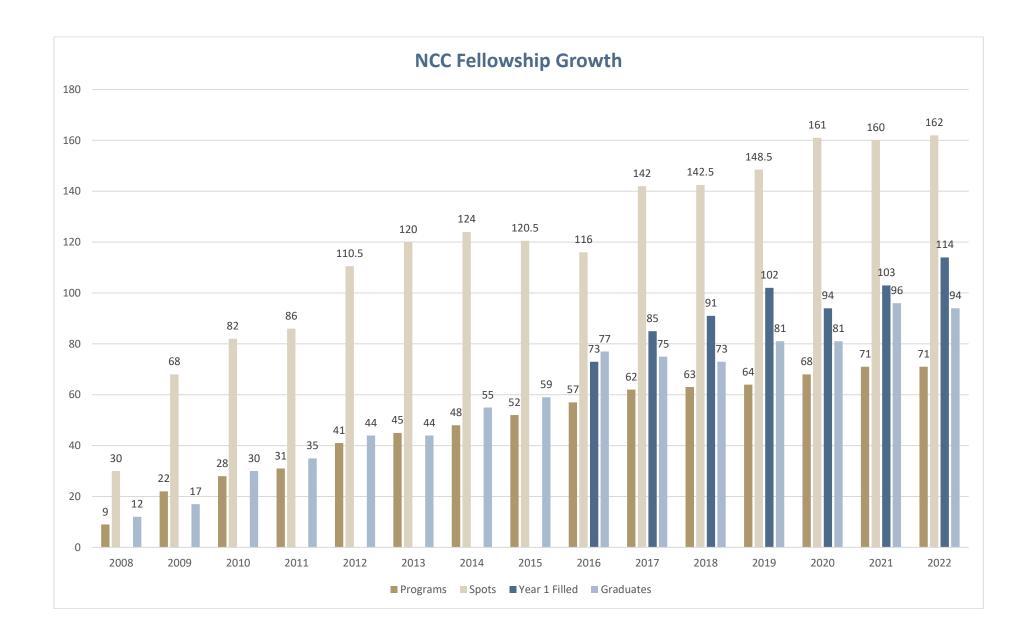
Primary Board Certification: ABMS (812); AOA (4); RCPSC (3)

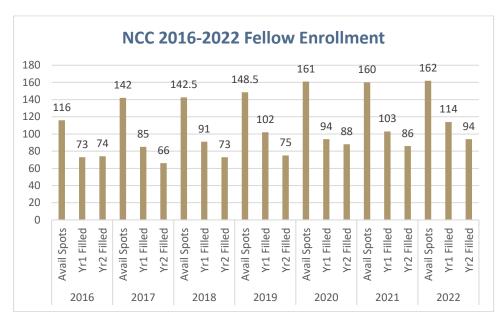
Certification Pass Rates (tracking began in 2014)

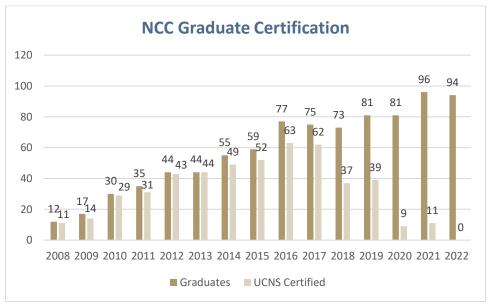
	Pass Rate	
Year	Fellow	Non-Fellow
2013	94%	73%
2015	96%	47%
2017	86%	51%
2019	83%	70%
2021	88%	76%

Enrollment

2016 Approved Spots: 116 | 2016 Filled: Year 1 (73); Year 2 (74) 2017 Approved Spots: 142 | 2017 Filled: Year 1 (85); Year 2 (66) 2018 Approved Spots: 142.5 | 2018 Filled: Year 1 (91); Year 2 (73) 2019 Approved Spots: 148.5 | 2019 Filled: Year 1 (102); Year 2 (75) 2020 Approved Spots: 161 | 2020 Filled: Year 1 (94); Year 2 (88) 2021 Approved Spots: 160 | 2021 Filled: Year 1 (103); Year 2 (86) 2022 Approved Spots: 162 | 2022 Filled: Year 1 (114); Year 2 (94)







Subspecialty: NeuroimagingFirst 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: 40 | UCNS Certified: 27

Primary Specialty: Neurology (39); Unknown (1)

Primary Board Certification: ABMS (36); AOA (0); RCPSC (0); Unknown (1)

Certification Pass Rates (tracking began in 2014)

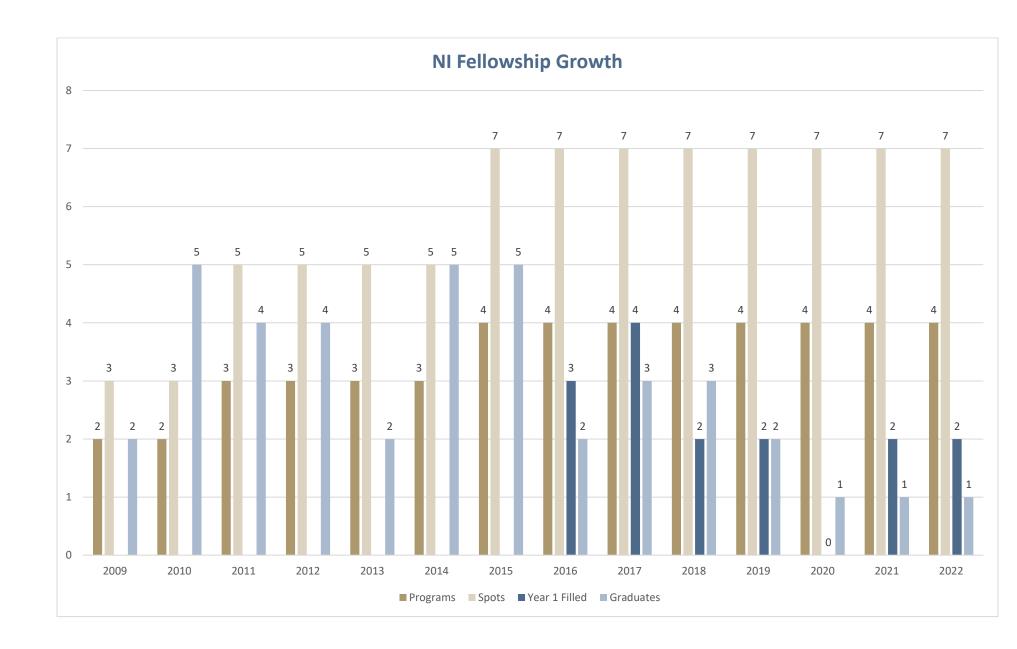
	Pass Rate	
Year	Fellow	Non-Fellow
2015	90%	86%
2017	100%	84%
2019	100%	100%
2021	100%	100%

Enrollment

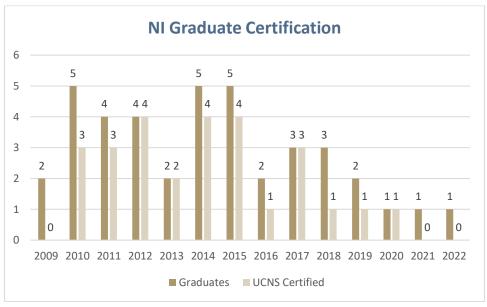
2016 Approved Spots: 7 | 2016 Filled: 3 2017 Approved Spots: 7 | 2017 Filled: 4 2018 Approved Spots: 7 | 2018 Filled: 2 2019 Approved Spots: 7 | 2019 Filled: 2

2020 Approved Spots: 7 | 2020 Filled: Year 1 (0); Year 2 (1) 2021 Approved Spots: 7 | 2021 Filled: Year 1 (2)

2022 Approved Spots: 7 | 2022 Filled: Year 1 (2)







Subspecialty: Neuro-oncology

First program accredited in 2008

Fellowships

Currently Accredited: 36 | Attrition: 3 (2015; 2022 x2) | Inactive: 3

Program Construction: 1 year (8); 2 years (6); 1 or 2 years (18); 1, 2, or 3 years (3); 2 or 3 years (1)

Departments: Neurology (29); Neurosurgery (5); Neuro-oncology (1); 1 Hem/Onc

Program Director Specialty: Neurology (33); IM (1); Neuro/Peds (1); Neurosurgery (1)

Fellows

Graduates: 260 | UCNS Certified: 196 (21 applications received for 2023 examination)

Primary Specialty: Neuro (235); Child Neuro (3); IM (4); IM/Hem-Onc (3); Hem-Onc (2); NS (3); IM/Med-Onc (3); Med-Onc (2);

Neuro/Psych (2); Peds Hem-Onc (2); Peds (1)

Primary Board Certification: ABMS (225); 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%
2021	86%	70%

Enrollment

2016 Approved Spots: 38 | 2016 Filled: Year 1 (20); Year 2 (16)

2017 Approved Spots: 46 | 2017 Filled: Year 1 (24); Year 2 (16)

2018 Approved Spots: 50 | 2018 Filled: Year 1 (23); Year 2 (18)

2019 Approved Spots: 55 | 2019 Filled: Year 1 (22); Year 2 (18)

2020 Approved Spots: 57 | 2020 Filled: Year 1 (25); Year 2 (15)

2021 Approved Spots: 56 | 2021 Filled: Year 1 (20) Year 2 (20)

2022 Approved Spots: 55.5 | 2022 Filled: Year 1 (26) Year 2 (13)

