



ACGME International

**Advanced Specialty Program Requirements for
Graduate Medical Education in
Neurology**

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1 **ACGME International Specialty Program Requirements for**
2 **Graduate Medical Education**
3 **in Neurology**

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5 **Int. Introduction**
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7 *Background and Intent: Programs must achieve and maintain Foundational Accreditation*
8 *according to the ACGME-I Foundational Requirements prior to receiving Advanced*
9 *Specialty Accreditation. The Advanced Specialty Requirements noted below*
10 *complement the ACGME-I Foundational Requirements. For each section, the Advanced*
11 *Specialty Requirements should be considered together with the Foundational*
12 *Requirements.*
13

14 **Int. I. Definition and Scope of the Specialty**
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16 Neurology includes the diagnosis and treatment of all categories of conditions
17 and diseases involving the central and peripheral nervous system, including the
18 autonomic nervous and somatic nervous systems, their coverings, blood
19 vessels, and all effector tissues and muscles. The purpose of the education
20 program is to prepare the physician for the independent practice of clinical
21 neurology.
22

23 **Int. II. Duration of Education**
24

25 Int. II.A. The educational program in neurology must be 48 or 60 months in length.
26

27 **I. Institution**
28

29 **I.A. Sponsoring Institution**
30

31 I.A.1. The Sponsoring Institution and program should allocate adequate
32 educational resources to facilitate resident involvement in
33 scholarly activities.
34

35 **I.B. Participating Sites**
36

37 See International Foundational Requirements, Section I.B.
38

39 **II. Program Personnel and Resources**
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41 **II.A. Program Director**
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43 See International Foundational Requirements, Section II.A.
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45 **II.B. Faculty**
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47 II.B.1. The faculty must include a program director, a child neurologist, and a
48 minimum of four full-time neurology faculty members who provide
49 clinical service and teaching and who devote sufficient time to the
50 program to ensure basic and clinical education for residents.

- 51 II.B.2. The faculty must include specialists with expertise in all the disciplines
52 related to neurology, including behavioral neurology, cerebrovascular
53 disease, child neurology, clinical neurophysiology, critical care, epilepsy,
54 infectious disease, movement disorders, neuro-genetics, neuroimaging,
55 neuro-immunology, neuromuscular disease, neuro-oncology, neuro-
56 ophthalmology, neuro-otology, pain management, psychiatry, sleep
57 disorders, and the neurology of aging .
- 58
- 59 II.B.2.a) These specialists should be available for consultation on a regular
60 basis to neurology residents.
- 61
- 62 **II.C. Other Program Personnel**
- 63
- 64 See International Foundational Requirements, Section II.C.
- 65
- 66 **II.D. Resources**
- 67
- 68 II.D.1. The patient population available to neurology residents must reflect the full
69 spectrum of neurological disorders across the lifespan, to include patients
70 seen in multiple settings, including outpatient, inpatient, emergency, and
71 intensive care.
- 72
- 73 **III. Resident Appointment**
- 74
- 75 See International Foundational Requirements, Section III.
- 76
- 77 **IV. Specialty-Specific Educational Program**
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- 79 **IV.A. ACGME-I Competencies**
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- 81 IV.A.1. The program must integrate the following ACGME-I Competencies into
82 the curriculum.
- 83
- 84 IV.A.1.a) Professionalism
- 85
- 86 IV.A.1.a).(1) Residents must demonstrate a commitment to
87 professionalism and an adherence to ethical principles.
88 Residents must demonstrate:
- 89
- 90 IV.A.1.a).(1).(a) compassion, integrity, and respect for others;
- 91
- 92 IV.A.1.a).(1).(b) responsiveness to patient needs that supersedes
93 self-interest;
- 94
- 95 IV.A.1.a).(1).(c) respect for patient privacy and autonomy;
- 96
- 97 IV.A.1.a).(1).(d) accountability to patients, society, and the
98 profession; and,

99	IV.A.1.a).(1).(e)	sensitivity and responsiveness to a diverse patient population, including to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation.
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104	IV.A.1.b)	Patient Care and Procedural Skills
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106	IV.A.1.b).(1)	Residents must provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents must demonstrate competence in:
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111	IV.A.1.b).(1).(a)	the management of outpatients and inpatients with neurological disorders across the lifespan, including those who require emergency and intensive care;
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116	IV.A.1.b).(1).(b)	care of patients in the areas of critical care, neuromuscular, ambulatory, neurodegenerative, and pediatrics, including: by evaluating a minimum of five different patients as specified below during the course of the educational program:
117		
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123	IV.A.1.b).(1).(b).(i)	Critical care: one critically ill adult patients with neurological disease in either an intensive care unit or emergency department setting, or through an emergency consultation from another inpatient service;
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129	IV.A.1.b).(1).(b).(ii)	Neuromuscular: one adult patients with a neuromuscular disease who may be in either an inpatient or outpatient setting;
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133	IV.A.1.b).(1).(b).(iii)	Ambulatory: one adult patients <u>in an outpatient setting</u> with an episodic disorder, such as seizures or migraine;
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136		
137	IV.A.1.b).(1).(b).(iv)	Neurodegenerative: one adult patients with a neurodegenerative disorder, such as dementia, a movement disorder, or multiple sclerosis; and,
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142	IV.A.1.b).(1).(b).(v)	pediatric ÷ one child patients with a neurological disorder.
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145	IV.A.1.c)	Medical Knowledge

146	IV.A.1.c).(1)	Residents must demonstrate knowledge of established and evolving biomedical clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to patient care. Residents must demonstrate knowledge of:
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152	IV.A.1.c).(1).(a)	major developments in the clinical sciences relating to neurology; and,
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154		
155	IV.A.1.c).(1).(b)	the basic sciences through application of this knowledge in the care of their patients and by passing clinical skills examinations.
156		
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158		
159	IV.A.1.d)	Practice-based Learning and Improvement
160		
161	IV.A.1.d).(1)	Residents must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and lifelong learning. Residents are expected to develop skills and habits to be able to meet the following goals:
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168	IV.A.1.d).(1).(a)	identify strengths, deficiencies, and limits in one's knowledge and expertise;
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171	IV.A.1.d).(1).(b)	identify and perform appropriate learning activities;
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173	IV.A.1.d).(1).(c)	incorporate formative evaluation feedback into daily practice;
174		
175		
176	IV.A.1.d).(1).(d)	locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems;
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180	IV.A.1.d).(1).(e)	participate in the education of patients, patients' families, students, other residents, and other health professionals;
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184	IV.A.1.d).(1).(f)	set learning and improvement goals;
185		
186	IV.A.1.d).(1).(g)	supervise other residents, medical students, nurses, and other health care personnel.
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189	IV.A.1.d).(1).(h)	systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement; and,
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193	IV.A.1.d).(1).(i)	use information technology to optimize learning;
194		
195	IV.A.1.e)	Interpersonal and Communication Skills

196	IV.A.1.e).(1)	Residents must demonstrate interpersonal and
197		communication skills that result in the effective exchange
198		of information and collaboration with patients, their
199		families, and health professionals. Residents must:
200		
201	IV.A.1.e).(1).(a)	communicate effectively with patients, patients'
202		families, and the public, as appropriate, across a
203		broad range of socioeconomic and cultural
204		backgrounds;
205		
206	IV.A.1.e).(1).(b)	communicate effectively with physicians, other
207		health professionals, and health-related agencies;
208		
209	IV.A.1.e).(1).(c)	work effectively as a member or leader of a health
210		care team or other professional group;
211		
212	IV.A.1.e).(1).(d)	act in a consultative role to other physicians and
213		health professionals; and,
214		
215	IV.A.1.e).(1).(e)	maintain comprehensive, timely, and legible
216		medical records, if applicable.
217		
218	IV.A.1.f)	Systems-based Practice
219		
220	IV.A.1.f).(1)	Residents must demonstrate an awareness of and
221		responsiveness to the larger context and system of health
222		care, as well as the ability to call effectively on other
223		resources in the system to provide optimal health care.
224		Residents must:
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226	IV.A.1.f).(1).(a)	work effectively in various health care delivery
227		settings and systems relevant to their clinical
228		specialty;
229		
230	IV.A.1.f).(1).(b)	coordinate patient care within the health care
231		system relevant to their clinical specialty;
232		
233	IV.A.1.f).(1).(c)	incorporate considerations of cost awareness and
234		risk-benefit analysis in patient and/or population-
235		based care as appropriate;
236		
237	IV.A.1.f).(1).(d)	advocate for quality patient care and optimal patient
238		care systems;
239		
240	IV.A.1.f).(1).(e)	work in interprofessional teams to enhance patient
241		safety and improve patient care quality; and,
242		
243	IV.A.1.f).(1).(f)	participate in identifying system errors and
244		implementing potential systems solutions.

- 245 **IV.B. Regularly Scheduled Educational Activities**
 246
 247 IV.B.1. The curriculum must have organized instruction in the basic
 248 neurosciences.
 249
 250 IV.B.2. Additional topics that must be covered during seminars and conferences
 251 include:
 252
 253 IV.B.2.a) bioethics;
 254
 255 IV.B.2.b) cost-effective care; and,
 256
 257 IV.B.2.c) palliative care, including adequate pain relief, as well as
 258 psychosocial support and counseling for patients and their
 259 families.
 260
 261 IV.B.3. The basic science curriculum must include the scientific foundations on
 262 which clinical neurology is based.
 263
 264 IV.B.4. Residents must receive instruction in:
 265
 266 IV.B.4.a) the principles of psychopathology, psychiatric diagnosis, and
 267 therapy and indications for and complications of drugs used
 268 in psychiatry; and,
 269
 270 IV.B.4.b) appropriate and compassionate methods of end-of-life palliative
 271 care, including adequate pain relief and psychosocial support
 272 and counseling for patients and their families about these issues.
 273
 274 IV.B.5. Residents should attend one national professional conference during the
 275 educational program.
 276

277 **IV.C. Clinical Experiences**
 278

- 279 IV.C.1. The program must include one year of broad clinical experience in general
 280 internal medicine. This experience must occur during:
 281
 281 IV.C.1.a) the first year of the neurology program; or,
 282
 282 IV.C.1.b) a preliminary year in an ACGME-I-accredited internal medicine
 283 program; or,
 284
 284 IV.C.1.c) an ACGME-I-accredited transitional year program; or,
 285
 286 IV.C.1.d) at the discretion of the Review Committee-International, a program
 287 for which a governmental or regulatory body is
 288 responsible for maintenance of a curriculum providing clinical and
 289 didactic experiences to develop competence in the fundamental
 290 clinical skills of internal medicine.
 291
 292 IV.C.2. Experience in general internal medicine must include at least:
 293
 294 IV.C.2.a) eight months in internal medicine with primary responsibility in

- 295 patient care; and,
296 IV.C.2.b) six months in internal medicine with primary responsibility in
297 patient care, and at least two months comprising one or more
298 months of pediatrics, emergency medicine, internal medicine, or
299 family medicine.
- 300 IV.C.3. The program must include at least 18 months (full-time equivalent) of
301 clinical adult neurology that includes:
302
303 IV.C.3.a). at least six months of inpatient experience in adult
304 neurology; and,
305
306 IV.C.3.b) at least six months (full-time equivalent) of outpatient
307 experience in clinical adult neurology.
308
309 IV.C.3.b).(1) The outpatient experience must include a resident
310 longitudinal/continuity clinic with attendance by each resident
311 for one half day weekly throughout the program.
312
313 IV.C.4. The program must include the following clinical experiences:
- 314 IV.C.4.a) at least three months of elective time;
315
316 IV.C.4.b) at least three months (full-time equivalent) in clinical child
317 neurology with management responsibility under the supervision of
318 a child neurologist with appropriate certification or suitable
319 equivalent qualifications;
320
321 IV.C.4.c) at least one-month full-time equivalent experience in clinical
322 psychiatry, including cognition and behavior, under the supervision
323 of a certified psychiatrist or another individual who possesses
324 qualifications acceptable to the Review Committee;
325
326 IV.C.4.d) clinical teaching rounds, supervised by faculty members, occurring
327 at least five days per week;
328
329 IV.C.4.e) exposure to and understanding of evaluation and management of
330 patients with neurological disorders in various settings, including
331 an intensive care unit and an emergency department, and of
332 patients requiring acute neurosurgical management; and,
333
334 IV.C.4.f) experience in neuroimaging, including magnetic resonance
335 imaging, computerized tomography, and neurosonology.
336
- 337 **IV.D. Scholarly Activity**
338
- 339 IV.D.4. Resident Scholarly Activity
340
341 IV.D.4.a) The curriculum must advance residents' knowledge of the basic
342 principles of research, including how research is conducted,
343 evaluated, explained to patients, and applied to patient care.

344	IV.D.4.b)	Residents should participate in scholarly activity.
345		
346	IV.D.5.	Faculty Scholarly Activity
347		
348		See International Foundational Requirements, Section IV.D.2.
349		
350	V.	Evaluation
351		
352		See International Foundational Requirements, Section V.
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354	VI.	The Learning and Working Environment
355		
356		See International Foundational Requirements, Section VI.