

## **ACGME International**

Advanced Specialty Program Requirements for Graduate Medical Education in Rheumatology (Internal Medicine)

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1 2	ACGME International Specialty Program Requirements for Graduate Medical Education in Rheumatology (Internal Medicine)		
3 4	Int.	Introduction	
5 6 7 8 9 10 11 12		Background and Intent: Programs must achieve and maintain Foundational Accreditation according to the ACGME-I Foundational Requirements prior to receiving Advanced Specialty Accreditation. The Advanced Specialty Requirements noted below complement the ACGME-I Foundational Requirements. For each section, the Advanced Specialty Requirements should be considered together with the Foundational Requirements.	
13	Int. I.	Definition and Scope of the Specialty	
14 15 16 17 18 19 20 21 22 23		Rheumatology is a subspecialty of internal medicine that The medical specialty of rheumatology focuses on the diagnosis and treatment therapy of conditions and medical diseases affecting of the joints, muscles, and connective tissues, bones It deals mainly with clinical problems involving joints, soft tissues, certain autoimmune diseases, vasculitis, and heritable connective tissue disorders, and on processes of autoimmunity and inflammation that affect not only the musculoskeleton, but the organ systems more broadly.	
24	Int. II.	Duration of Education	
25 26 27	Int. II.A	. The educational program in rheumatology must be 24 or 36 months in length.	
28 29	l.	Institution	
30	I.A.	Sponsoring Institution	
31 32 33 34	I.A.1.	A fellowship in rheumatology must function as an integral part of an ACGME-I-accredited residency in internal medicine.	
35	I.B.	Participating Sites	
36		See International Foundational Requirements, Section I.B.	
37	II.	Program Personnel and Resources	
38 39	II.A.	Program Director	
40		See International Foundational Requirements, Section II.A.	
41 42	II.B.	Faculty	
43 44		See International Foundational Requirements, Section II.B.	
45 46	II.C.	Other Program Personnel	
47 48	II.C.1.	Programs should have a working relationship with both a radiologist and an orthopaedic surgeon, including availability for teaching and	

49		consultation.	
50 51 52 53	II.C.2.	Fellows should have meaningful working relationships, including availability for teaching and consultation, with at least one pathologist, one nephrologist, one dermatologist, one cardiologist, one radiologist, and one orthopaedic surgeon;	
54			
55 56 57	II.D.	Resources	
58 59 60	II.D.1.	The following laboratory and imaging services must be present at the primary clinical site or at participating site(s):	
61 62	II.D.1.a)	clinical immunology lab services;	
63	II.D.1.b)	a compensated polarized light microscope;	
64 65 66 67	II.D.1.c)	computed tomography (CT), bone densitometry, magnetic resonance imaging (MRI), musculoskeletal-ultrasound, and angiography; and,	
68 69 70	II.D.1.d)	ultrasound for both diagnostic and interventional musculoskeletal applications at the bedside and in the ambulatory clinic.	
71 72 73	II.D.2.	Fellows must have access to facilities for rehabilitation medicine.	
74 75	II.D.3.	The program should have access to:	
76 77	II.D.3.a)	access to pathology services for evaluation of muscle, nervous system, skin, kidney, vascular, and synovial biopsy materials;	
78 79 80	II.D.3.b)	orthopaedic surgery services for obtaining synovial biopsies and consultations for joint arthroplasty and other surgical treatments; and,	
81 82 83 84	II.D.3.c)	other consultation services for obtaining indicated biopsies of muscle, nerveous system tissue, skin, kidneys, and arteries vasculature.	
85 86	III. Fellov	w Appointment	
87 88 89 90 91 92 93	III.A.	Eligibility Criteria	
	III.A.1.	Prior to appointment in the program, fellows should have completed an ACGME-I-accredited residency program in internal medicine, or an internal medicine residency program acceptable to the Sponsoring Institution's Graduate Medical Education Committee.	
94 95	III.B.	Number of Fellows	
96 97 98		See International Foundational Requirements, Section III.B.	

99	IV.	Specialty-Specific Educational Program
100 101	IV.A.	ACGME-I Competencies
102 103	IV.A.1	The program must integrate the following ACGME-I Competencies into the curriculum.
104 105 106	IV.A.1	I.a) Professionalism
106 107 108 109	IV.A.1	1.a).(1) Fellows must demonstrate a commitment to professionalism and an adherence to ethical principles.
110 111	IV.A.1	1.b) Patient Care and Procedural Skills
112 113 114 115 116	IV.A.1	Fellows must provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Fellows must demonstrate competence in managing the care of patients:
117 118 119 120 121 122 123	IV.A.1	in a variety of health care settings, including inpatient and ambulatory settings; the practice of health promotion, disease prevention, diagnosis, care, and treatment of patients of each gender, from adolescence to old age, during health and all stages of illness;
124	IV.A.1	1.b).(1).(b) <u>using critical thinking and evidence-based tools;</u>
125	IV.A.1	1.b).(1).(c) <u>using population-based data; and,</u>
126 127 128	IV.A.1	1.b).(1).(d) with whom they have limited or no physical contact, through the use of telemedicine.
129	IV.A.1	1.b).(2). <u>Fellows must demonstrate competence in the treatment of:</u>
130 131 132 133	IV.A.1	1.b).(2).(a). <u>autoimmune manifestations of infectious conditions, such as lyme disease, other tick-borne illness, and subacute bacterial endocarditis;</u>
134	IV.A.1	1.b).(2).(b). crystal induced synovitis;
135 136	IV.A.1	.b).(2).(c). infection of joints and soft tissues;
136 137 138 139 140	IV.A.1	inflammatory polymyositis (polymyositis, dermatomyositis, necrotizing myositis, and inclusion body myositis), as well as myositis mimics;
141	IV.A.1	1.b).(2).(e). metabolic diseases of bone;
142 143 144	IV.A.1	1.b).(2).(f).  monogenic and polygenic autoinflammatory syndromes, including familial Mediterranean fever, familial cold autoinflammatory syndromes, and others;

145 146 147 148 149 150 151	IV.A.1.b).(2).(g).	musculoskeletal pain;
	IV.A.1.b).(2).(h).	non-articular rheumatic diseases, including fibromyalgia;
	IV.A.1.b).(2).(i).	non-surgical exercise-related (sports) injury;
	IV.A.1.b).(2).(j).	osteoarthritis;
153 154	IV.A.1.b).(2).(k).	osteoporosis;
155 156	IV.A.1.b).(2).(I).	pediatric rheumatic diseases;
157 158 159	IV.A.1.b).(2).(m).	regional musculoskeletal pain syndromes, acute and chronic musculoskeletal pain syndromes, and exercise-related syndromes;
160 161	IV.A.1.b).(2).(n).	relapsing polychondritis;
162 163	IV.A.1.b).(2).(o).	rheumatoid arthritis;
164 165	IV.A.1.b).(2).(p).	Sjögren's Syndrome;
166 167	IV.A.1.b).(2).(q).	spondyloarthropathies;
168	IV.A.1.b).(2).(r).	systemic diseases with rheumatic manifestations;
169 170	IV.A.1.b).(2).(s).	systemic lupus erythematosus;
170 171 172 173 174 175	IV.A.1.b).(2).(t).	scleroderma/systemic sclerosis and scleroderma mimics; and,
	IV.A.1.b).(2).(u).	vasculitis, including primary large, medium, and small vessel vasculitis, vasculitis secondary to other rheumatic diseases, and vasculitis mimics.
177 178 179	IV.A.1.b).(3).	Fellows must be able to perform all medical, diagnostic, and surgical procedures considered essential to the subspecialty, including;
180 181 182	IV.A.1.b).(3).(a)	performing diagnostic and therapeutic procedures relevant to their individual specific planned career path, to include:
183 184 185 186 187 188 189	IV.A.1.b).(6).(a).(i)	performance of arthrocentesis of peripheral joints and periarticular/soft tissue injections, including instruction and experience in performing these procedures under ultrasound guidance; and,
190 191	IV.A.1.b).(3).(a).(i)	performance and interpretation of diagnostic ultrasonography of painful musculoskeletal

192 193 194 195		structures commonly encountered in a rheumatology clinic, including synovial joints, periarticular soft tissues, tendons, and ligaments.
196 197 198 199	IV.A.1.b).(3).(b)	treating their patients' conditions with practices that are patient-centered, safe, scientifically based, effective, timely, and cost-effective, including musculoskeletal pain assessment and management;
200 201	IV.A.1. b).(3).(c)	using diagnostic and/or imaging studies relevant to the care of the patient, including:
202 203 204 205 206	IV.A.1.b).(3).(c).(i)	examination and interpretation of synovial fluid under conventional and polarized light microscopy; and,
207 208 209 210	IV.A.1.b).(3).(c).(ii)	interpretation of radiographs of normal and diseased joints, bones, periarticular structures, and prosthetic joints.
211 212	IV.A.1.c)	Medical Knowledge
213 214 215 216 217 218	IV.A.1.c).(1)	Fellows 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. Fellows must demonstrate knowledge of:
219 220 221	IV.A.1.c).(1).(a)	the scientific method of problem solving and evidence-based decision-making;
221 222 223 224 225 226 227	IV.A.1.c).(1).(b)	the indications, contraindications, and techniques for, and limitations, complications, and interpretation of results of those diagnostic and therapeutic procedures integral to the discipline, including the appropriate indications for and use of screening tests and procedures, to include:
228 229 230 231	IV.A.1.c).(1).(b).(i)	arteriograms (conventional and MRI/ magnetic resonance angiogram (MRA)) for patients with suspected or confirmed vasculitis;
232	IV.A.1.c).(1).(b).(ii)	arthroscopy;
233 234 235 236	IV.A.1.c).(1).(b).(iii)	biopsy specimens, including histochemistry and immunofluorescence of tissues relevant to the diagnosis of rheumatic diseases;
237 238	IV.A.1.c).(1).(b).(iv)	bone densitometry;
239 240	IV.A.1.c).(1).(b).(v)	CT of lungs and paranasal sinuses for

241 242		patients with suspected or confirmed rheumatic disorders;
243 244 245 246	IV.A.1.c).(1).(b).(vi)	electromyograms and nerve conduction studies for patients with suspected or confirmed rheumatic disorders;
246 247 248 249	IV.A.1.c).(1).(b).(vii)	<u>lip biopsy.</u> parotid scans, and salivary flow studies;
250 251 252 253	IV.A.1.c).(1).(b).(viii)	MRI of the central nervous system (brain and spinal cord) for patients with suspected or confirmed rheumatic disorders;
254 255 256 257 258	IV.A.1.c).(1).(b).(ix)	plain radiography, arthrography, ultrasonography, radionuclide scans, CT, and MRI of joints, bones, and periarticular structures;
259 260	IV.A.1.c).(1).(b).(x)	Schirmer's and rose Begal tests; and,
261 262 263 264 265	IV.A.1.c).(1).(b).(xi)	ultrasound scans of normal and painful musculoskeletal structures commonly encountered in a rheumatology clinic, including synovial joints, periarticular soft tissues, tendons, and ligaments.
266 267 268 269 270	IV.A.1.c).(1).(c)	aging influences on musculoskeletal function and responses to prescribed therapies for rheumatic diseases;
271 272 273 274 275	IV.A.1.c).(1).(d)	anatomy, basic immunology, genetic basis, cell biology, and metabolism pertaining to rheumatic diseases, disorders of connective tissue, metabolic disease of bone, osteoporosis, and musculoskeletal pain syndromes;
276 277 278 279	IV.A.1.c).(1).(e)	appropriate employment of principles of physical medicine and rehabilitation in the care of patients with rheumatic disorders;
280 281 282 283 284	IV.A.1.c).(1).(f)	essential components of quality experimental design, clinical trial design, data analysis, and interpretation of results, and the importance of adherence to ethical standards of experimentation;
285 286 287 288	IV.A.1.c).(1).(g)	indications for surgical and orthopaedic consultation, to include indications for arthroscopy and joint replacement/arthroplasty;
289 290 291	IV.A.1.c).(1).(h)	pathogenesis, epidemiology, clinical expression, treatments, and prognosis of the full range of rheumatic and musculoskeletal diseases;

292 293 294 295 296 297 298 299 300	IV.A.1.c).(1).(ij	interactions, and relative costs of drug therapies used in the management of rheumatic disorders; and,
301	IV.A.1.c).(2).	Fellows must demonstrate sufficient knowledge specific to the
302 303 304 305		subspecialty of rheumatology including application of technology appropriate for the clinical context, to include evolving technologies.
306	IV.A.1.d)	Practice-Based Learning and Improvement
307 308 309 310 311 312	IV.A.1.d).(1)	Fellows 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.
313	IV.A.1.e)	Interpersonal and Communication Skills
314 315 316 317 318	IV.A.1.e).(1)	Fellows must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, patients' families, and health professionals.
319 320	IV.A.1.f)	Systems-Based Practice
321 322 323 324 325 326	IV.A.1.f).(1)	Fellows must demonstrate an awareness of and responsiveness to the larger context and system of health care, including the social determinates of health, as well as the ability to call effectively on other resources in the system to produce optimal care.
327	IV.B.	Regularly Scheduled Educational Activities
328 329	IV.B.1.	The educational program must include didactic instruction based on the core knowledge content in rheumatology.
330 331	IV.B.1.a)	Fellows must have a sufficient number of didactic sessions to ensure fellow-fellow and fellow-and-faculty member interaction.
332 333	IV.B.2.	The program must ensure that fellows have an opportunity to review all knowledge content from conferences that they could not attend.
334 335 336	IV.B.3.	Fellows must receive instruction in practice management relevant to rheumatology.
337	IV.C.	Clinical Experiences

338 339 340 341 342	IV.C.1.	Assignment of rotations must be structured to minimize the frequency of rotational transitions, and rotations must be of sufficient length to provide a quality educational experience, defined by continuity of patient care, ongoing supervision, longitudinal relationships with faculty members, and meaningful assessment and feedback.
343 344 345	IV.C.2.	Rotations must be structured to allow fellows to function as a part of an effective interprofessional team that works together toward the shared goals of patient safety and quality improvement.
346 347 348	IV.C.3.	Rotations must be structured to minimize conflicting inpatient and outpatient responsibilities.
349 350	IV.C.4.	At least 12 months of education must be devoted to clinical experience.
351 352	IV.C.5.	Fellows must have experience in the role of a rheumatology consultant in both the inpatient and ambulatory settings.
353 354 355	IV.C.6.	The program must provide educational experiences in team-based care that allow fellows to interact with and learn from other health care professionals.
356 357	IV.C.7.	The educational program must provide fellows with elective experiences relevant to their future practice or to further skill/competence development.
358	IV.C.8.	Fellows must participate in training using simulation.
359 360 361 362	IV.C.9.	The program must include a minimum of two half-days of ambulatory care per week, averaged throughout the educational program, including the continuity ambulatory experience.
363 364 365	IV.C.10.	Fellows should have a structured continuity ambulatory clinic experience for the duration of the program that exposes them to the breadth and depth of rheumatology.
366 367 368 369	IV.C.10.a)	This experience should include an appropriate distribution of patients of each gender and a diversity of ages.
370 371 372	IV.C.10.a)	This experience should average one half-day each week, averaged throughout the educational program.
372 373 374 375	IV.C.10.a).(1)	Each fellow should, on average, be responsible for four to eight patients during each half-day session.
376 377 378 379	<del>IV.C.10.a).(1).(a)</del>	Each fellow should, on average, be responsible for no more than eight to 12 patients during each half-day ambulatory session.
380 381 382 383	IV.C.7.a)	Continuity patients should not be limited to one disease type but should expose fellows to a variety and multiples stages of diseases.
384	IV.C.10. b)	The continuing patient care experience should not be interrupted

385 386		by more than one month, excluding a fellow's vacation.	
387 388	IV.C.9	Programs with the qualified faculty members and facilities should provide education in pediatric rheumatic diseases.	
389 390 391	IV.C.	Scholarly Activity	
	IV.D.1	. Fellows' Scholarly Activity	
392 393 394 395 396 397 398	IV.D.1	While in the program, each fellow must complete at least one of to following scholarly activities: participation in grand rounds; poster presentations; workshops; quality improvement presentations; podium presentations; grant leadership; non-peer-reviewed print/electronic resources; articles or publications; book chapters; textbooks; webinars; service on professional committees; or service as a journal reviewer, journal editorial board member, or editor.	
399 400	IV.D.2	. Faculty Scholarly Activity	
401 402		See International Foundational Requirements, Section IV.D.2.	
403 404	V.	Evaluation	
405 406		See International Foundational Requirements, Section V.	
407	VI. The Learning and Working Environment		
408 409	VI.A.	Principles	
410 411		See International Foundational Requirements, Section VI.A.	
412 413	VI.B.	Patient Safety	
414 415		See International Foundational Requirements, Section VI.B.	
416 417	416 VI.C. Quality Improvement		
418 419		See International Foundational Requirements, Section VI.C.	
420	VI.D.	Supervision and Accountability	
421 422 423 424	VI.D.1	Direct supervision of procedures performed by each fellow must occur until competence has been acquired and documented by the program director.	
425 426 427	VI.E.	Professionalism	
427 428 429		See International Foundational Requirements, Section VI.E.	
430 431	VI.F.	Well-Being	
432 433		See International Foundational Requirements, Section VI.F.	

434	VI.G.	Fatigue
435 436		See International Foundational Requirements, Section VI.G.
437 438	VI.H.	Transitions of Care
439 440		See International Foundational Requirements, Section VI.H.
441 442	VI.I.	Clinical Experience and Education
443 444		See International Foundational Requirements, Section VI.I.
445 446	VI.J.	On-Call Activities
447 448		See International Foundational Requirements, Section VI.J.
448		See international Foundational Requirements, Section VI.J.