In 1996, a workforce study commissioned by the American College of Rheumatology (ACR) projected there would be a surplus of rheumatologists in the near future. That prediction was based on an anticipated increase in HMOs and of rheumatic disease management by primary care physicians. However, those events failed to materialize and now several lines of evidence are sounding a warning bell about a shortage of rheumatologists. Continued on page 4.
2006-2007 has been an exciting year for Cleveland Clinic Rheumatology. We have grown to incorporate all of the rheumatology staff within our Family Health Centers. Our total rheumatologist-clinician work force is 29 and growing. Operational and geographic consolidation by subspecialty will allow us to provide more integrated services throughout the Clinic enterprise. We are in the midst of recruitment of several additional positions for the coming year. The new staff being sought will have skills in:

- general rheumatology
- musculoskeletal medicine/biomechanics,
- metabolic bone diseases
- vasculitis and/or outcomes research.

In the past year, Steven Spalding, M.D., has joined our Pediatric Rheumatology section, coming from the University of Pittsburgh. In the fall of 2007, Alexandra Villa Forte, M.D., will be joining the Cleveland Clinic Center for Vasculitis Care and Research, where after a Rheumatology Fellowship, she completed her training in inflammatory vascular diseases. Elizabeth File, M.D., and Judith Manzon, M.D., both recent graduates of our program, are practicing general rheumatology in our Strongsville and Westlake Family Health Centers, respectively. There has already been expansion of services and research in General and Pediatric Rheumatology, and Vasculitis.

In the following pages, select members of our faculty have shared research and service-related experiences. We hope that you will find these brief articles relevant to you as a practicing physician and to the field of Rheumatology in general.

We are interested in better serving patients and care providers with our newsletters. If you have suggestions about how we may improve this offering, please let me know directly.

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Cleveland Clinic
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A wealth of evidence demonstrates the value of clinically based teaching methods in medical education. At Cleveland Clinic, Rheumatology Education Program Director Abby Abelson, M.D., has been involved in writing some of the cases that are included in the problem-based rheumatology learning program at the Cleveland Clinic Lerner College of Medicine. Impressed by the outcomes of this approach for enabling student acquisition of knowledge about basic science, pathophysiology, pathology and management-related issues and recognizing the potential advantages that could be derived from a Web-based program, Dr. Abelson submitted a grant application to the American College of Rheumatology Research and Education Foundation for developing an online problem-based learning rheumatology curriculum.

She was awarded the grant, and on July 1, Dr. Abelson began a 3-year project working in collaboration with faculty from Cleveland Clinic’s Department of Rheumatic and Immunologic Disease and the Clinic’s departments of education and information technology to develop her vision of a dynamic, interactive program for teaching the clinical science of rheumatic disease to medical students, internal medicine residents and rheumatology fellows.

“Studies show that experiential learning techniques are highly accepted by medical students and that the knowledge gained via this method may be better retained and utilized compared with more traditional didactic techniques. However, I felt there was also a natural fit with a Web-based program. Computer-supported activities are very appealing as well to young learners, and the Web-based approach would enable creation of a versatile and flexible program that could readily address the informational needs of students at different levels of learning while being amenable to rapid modifications to incorporate new information as it quickly emerges,” Dr. Abelson says.

Broad accessibility is another advantage of a Web-based program.

“There are residents in this country and internationally who may be training at a facility that either has a small rheumatology department or none at all. These individuals could link to the online program and get a comprehensive rheumatology education that might not be attainable otherwise,” says Dr. Abelson.

She has identified 11 conditions that would be included in the curriculum. For all participants, the learning-based program would begin with the same case, but depending on the level of training of the “student,” the focused questions relating to the case would differ and link to different resources.

Dr. Abelson explains, “A first-year medical student might be led to materials on basic pathophysiology, anatomy, cell biology and immunology, whereas information provided to a third-year student would include a more in-depth review of those topics and begin to incorporate clinical issues, including differential diagnosis and treatment. Materials for third- and fourth-year medical students would integrate evaluation and management, and increasingly more complex information would be presented to internal medicine residents and rheumatology fellows.”

The program will be constructed to include an ongoing self-evaluation that allows the learner to assess subject mastery, and it will also be designed to obtain the participants’ feedback on how well the program is meeting their educational goals. Once the program is developed and in use, its impact will also be evaluated using a variety of endpoints. These include its effect on National Board scores or residency program in-service exam scores and also whether it influences more medical students and residents to pursue a career in rheumatology.

“Ultimately, one goal of the program is to inspire young physicians-in-training to become rheumatologists.”

“Ultimately, one goal of the program is to inspire young physicians-in-training to become rheumatologists.”
Rheumatologist Workforce Study

Sounds Alarms on Significant Impending Shortage

Excess Demand for Adult Rheumatologists 2005 - 2025, Baseline Case

<table>
<thead>
<tr>
<th>Year</th>
<th>Demand</th>
<th>Supply of 2005 Equivalent</th>
<th>Difference</th>
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<td>4,806</td>
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<td>4,643</td>
<td>2,576</td>
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</table>

"Assuming current supply and demand are in balance (there is a growing consensus that demand currently exceeds supply), we expect there will be about 5,000 rheumatologists (the number of rheumatologists will remain at current levels) and a demand for about 7,500, a shortfall of around 2,500 physicians by 2025," Dr. Deal says. There is an estimated 75% percent shortfall in pediatric rheumatologists currently. The committee's report identified three main drivers of the shortfall. They are an increase in per-capita income (which correlates with increased demand for medical specialty care), growth in the aging population leading to an increased prevalence of musculoskeletal diseases and no change in the number of practicing rheumatologists.

Dr. Deal and his colleagues in the advisory group identified three strategies for addressing the looming shortage. Those involve increasing the number of trained rheumatologists, increasing the use of non-physician clinicians (i.e., physicians' assistants and nurse practitioners) and redesigning practices, including such things as pre-appointment planning, group visits and chronic disease management programs. Of those approaches, practice redesign is considered most feasible.

"The Research and Education Foundation of the ACR is already providing funding for some additional fellowship slots, but that will only result in a slight increase in supply while the number of Graduate Medical Education-funded rheumatology spots has been frozen. Meeting the expected demand for rheumatologists would require a doubling of the number of rheumatologists being trained, and that is unlikely to happen," he explains.

"Rheumatology practices are also increasingly integrating non-physician clinicians, and the ACR is developing a Web-based rheumatology program for physician assistants and nurse practitioners which will reduce in-office training time for these health professionals to achieve clinical competence. However, our specialty has to compete against others that are able to offer higher salaries, and that puts us at a disadvantage,"

Against the limitations affecting those strategies, practice redesign appears to be the best opportunity for solving the expected workforce crisis.

"Practice redesign offers a more immediate and much less expensive method for managing the impending workforce shortage by increasing practice efficiency which could effectively increase supply and reduce demand," Dr. Deal says. Further action from the Committee on Training and Workforce is expected, and the group has also ordered an academic workforce study that will examine the issues affecting rheumatology fellowship training programs.

Continued from page 1.

Findings of a community survey show very long wait times for new patient appointments and great needs in practice groups to hire a rheumatologist immediately. Considering ACR member demographics, the situation is expected to worsen as the number of retirees will begin to exceed the number of new entrants into the field within the next decade.

Those observations provided the impetus for the ACR to commission another formal workforce study. Reported earlier this year (Arthritis & Rheumatism 2007;56:772-9), that study’s findings confirm the concerns about a shortage and suggest that by 2025, there will be an alarming 50% shortfall in the number of practicing rheumatologists in the United States available to serve the population’s needs.

Cleveland Clinic rheumatologist Chad L. Deal, M.D., was a member of the ACR Committee on Training and Workforce and served as chair of the Workforce Study Advisory Group when the recent study was undertaken and the report prepared.

"In contrast to the previous workforce study that used a consensus modeling approach based largely on expert opinions, our goal this time was to put some reasonable science into predicting future needs to develop more accurate projections,” Dr. Deal explains.

Dr. Deal and colleagues retained the services of a consulting group that specializes in health policy issues, the Lewin Group, to undertake a rigorous study. A computer-based model was developed to predict supply and demand. It can generate revised supply and demand predictions as any workforce dynamics change in the future.

"Practice redesign offers a more immediate and much less expensive method for managing the impending workforce shortage by increasing practice efficiency which could effectively increase supply and reduce demand," Dr. Deal says.
Pediatric Rheumatologist’s Expertise in Periodic Fever Syndromes Leads to Cleveland Clinic-NIH Partnership

Recent discoveries about the genetic etiology of several auto-inflammatory syndromes have rapidly led to exciting therapeutic advances and an improved prognosis for patients who suffer from some of these debilitating and potentially fatal disorders.

Having completed medical school in Israel, where the prototypical auto-inflammatory syndrome, familial Mediterranean fever (FMF), is common, Cleveland Clinic Pediatric Rheumatologist Philip J. Hashkes, M.D., M.Sc., has had a longstanding interest in and familiarity with these disorders. After coming to Cleveland Clinic to serve as Head of Pediatric Rheumatology, Dr. Hashkes spent time working at the National Institutes of Health (NIH) Periodic Fever (Auto-inflammatory) Disease Clinic in partnership with his work at Cleveland Clinic. As he prepares to assume the role of the nation’s “chief clinician” for patients with auto-inflammatory syndromes, Dr. Hashkes extends a simple but important message for his colleagues — be aware of auto-inflammatory syndromes and consider them in the differential diagnosis for patients who present with the hallmark features of these disorders.

“Auto-inflammatory syndromes usually present in children, but their onset may occur in adulthood. Timely diagnosis is important because treatments are available for many of these disorders and they can be life altering in mitigating the development of severe complications, significant morbidity and even mortality, especially from renal failure caused by amyloidosis,” says Dr. Hashkes.

Originally known as periodic fever syndromes, auto-inflammatory syndromes are characterized by attacks of unprovoked inflammation. The diseases falling within this category vary in their epidemiology with respect to ethnicity, age of onset, periodicity of recurrences and certain clinical features. However, recurrent episodes of fever, serositis, rash and joint symptoms are generally common to all.

“Clinicians need to maintain an index of suspicion for an auto-inflamatory syndrome in a patient who presents with episodic unexplained fever and/or symptoms involving the abdomen, chest, skin and joints with laboratory markers of inflammation,” Dr. Hashkes says.

The etiology of auto-inflammatory syndromes has been linked to mutations in genes responsible for the synthesis of proteins important in the regulation of the innate immune system. Dr. Kastner and two international teams of researchers were the first to identify a genetic cause for an auto-inflammatory syndrome in 1997 when they reported on genetic mutations associated with FMF. Subsequently, the genetic basis for several other auto-inflammatory syndromes has been elucidated. This research has enabled the design of tailored treatment.

“I turns out that a number of the discovered proteins are important in the regulation of interleukin-1 (IL-1) metabolism and the responsible mutations lead to increased IL-1 activity that triggers the inflammatory cascade. This information led to studies of treatment with anti-IL1 modalities that were found to be highly effective in dramatically altering the course of several of these diseases,” says Dr. Hashkes.

“Whereas previously, patients with some of the more severe auto-inflammatory syndromes only had a life expectancy to age 20, with anti-IL1 treatment, these individuals can essentially now live a symptom-free life. The opportunity to work as the director of the NIH clinic in this new therapeutic era is very exciting and gratifying,” Dr. Hashkes says.

In addition to his clinical responsibilities at the NIH, Dr. Hashkes will be actively involved in research there, including the design and conduct of clinical treatment trials and providing clinical support for more basic science investigations aimed at increasing understanding of existing diseases and defining new entities.

“Recent progress in this field has been made in leaps and bounds, but even in 2007, about 60% of patients with recurrent fever go undiagnosed, suggesting there are many syndromes yet to be described. In addition, there are some auto-inflammatory syndromes for which there are no effective treatments,” he says.

For example, colchicine is the standard of care for FMF and is effective for reducing the severity and frequency of inflammatory attacks in about 90% of patients. To help the small number of patients who are refractory or intolerant to treatment with colchicine, Dr. Hashkes has recently submitted a grant for an FMF study to evaluate anti-IL1 therapy in these patients. The rationale is based on the known effects of the FMF protein, pyrin, on IL-1 metabolism.

The etiology of auto-inflammatory syndromes has been linked to mutations in genes responsible for the synthesis of proteins important in the regulation of the innate immune system. Dr. Kastner and two international teams of researchers were the first to identify a genetic cause for an auto-inflammatory syndrome in 1997 when they reported on genetic mutations associated with FMF. Subsequently, the genetic basis for several other auto-inflammatory syndromes has been elucidated. This research has enabled the design of tailored treatment.

Recently, when Dr. Kastner was promot- ed to Clinical Director of the National Institute of Arthritis and Musculoske- letal and Skin Diseases, Dr. Hashkes was tapped to succeed him to direct the NIH Periodic Fever (Auto-inflammatory) Disease Clinic in partnership with his work at Cleveland Clinic. As he prepares to assume the role of the nation’s “chief clinician” for patients with auto-inflammatory syndromes, Dr. Hashkes extends a simple but important message for his colleagues — be aware of auto-inflammatory syndromes and consider them in the differential diagnosis for patients who present with the hallmark features of these disorders.

“The test we face is to design a program with a mix that can offer some- thing for everyone, whether their primary focus is in the areas of musculo- skeletal, rheumatic or immunologic disease,” says Dr. Mandell.

Ideas on program content are derived in part from solicited and unsolicited feedback. Dr. Mandell and his committee members review results and comments from the evaluation forms completed by the previous year’s meeting registrants. Input is also gathered through surveys sent to ACR members and from the proceedings at other ACR committee meetings, and is on the American Board of Internal Medicine Subspecialty Board on Rheumatology.

The 2007 ACR/ARHP scientific meeting will take place Nov. 6 to 11 at the new Boston Convention and Exhibition Center. In November 2006, during the previous year’s meeting in Washington, D.C., Dr. Mandell and the other Planning Committee members first gathered to begin discussing the 2007 program.

Dr. Mandell says that one of the challenges in developing a program for the ACR/ARHP meeting is to choose topics, speakers and formats that will appeal to and fit the educational needs of its diverse range of attendees.

“The ACR/ARHP scientific meeting attracts a large international population of practicing rheumatologists, other health professionals and research- ers in addition to attendees from the United States. The meeting partici- pants represent a variety of career backgrounds, including academicians with clinical science interests, basic science researchers and community practitioners, as well as rheumatology subspecialty fellows and internal medicine residents who may be considering pursuing a career in rheuma- tology,” he explains.

The 71st annual American College of Rheumatology/Association of Rheumatology Health Professionals (ACR/ARHP) scientific meeting represents the largest gathering in the world of physicians, researchers and health professionals who are dedicated to rheumatology.

Cleveland Clinic rheumatologist Brian F. Mandell, M.D., Ph.D., is chair- ing the committee responsible for the development of this year’s program.

In addition to being chairman of the 2007 ACR Annual Meeting Planning Committee and seeing patients, Dr. Mandell keeps himself busy wearing multiple other hats. He is Vice Chairman of Medicine for Education; is Editor-in-Chief, Cleveland Clinic Journal of Medicine; is on the planning committee for the 2009 American College of Physicians annual meeting; and is on the American Board of Internal Medicine Subspecialty Board on Rheumatology.
Nonsteroidal anti-inflammatory drugs (NSAIDs) are an important therapeutic option for patients with chronic arthritis. While the gastrointestinal safety of these agents has been a subject of significant research, the recent market withdrawal of rofecoxib (Vioxx, Roche), the selective cyclooxygenase-2 (COX-2) inhibitor, has focused increased attention on their potential to cause cardiovascular complications.

The importance of that association is further magnified by the fact that patients with rheumatoid arthritis as well as older individuals with osteoarthritis may already have an increased risk of cardiovascular disease.

Against that background, the Prospective Randomized Evaluation of Celecoxib (PRECISION) trial is a timely and important clinical study designed to examine the overall risks and benefits of celecoxib compared with two of the most commonly used non-selective NSAIDs for the treatment of arthritis pain (naproxen and ibuprofen). Cleveland Clinic rheumatologist Elaine Husni, M.D., M.P.H., a member of the PRECISION executive committee and the trial’s principal investigator at the Cleveland Clinic site, is particularly excited about this study because it is an important opportunity to help predict better patient outcomes based on understanding the risks and benefits of celecoxib as compared to other NSAIDs.

The primary endpoint for the study is a composite of cardiovascular events, including first occurrence of cardiovascular death, non-fatal myocardial infarction or non-fatal stroke. Patients will be followed for a minimum of 18 months or until 762 events have occurred.

“PRECISION is an important trial for many reasons. Foremost, it is designed to answer a critical clinical question, but it is also notable for the fact that it is being run independent of industry influence and because it illustrates a philosophy of improving outcomes for patients with musculoskeletal diseases through multidisciplinary collaboration in clinical research,” Dr. Husni says.

Working Closely with Orthopaedic Surgery

Many other studies in the very active clinical research program in the Department of Rheumatologic and Immunologic Diseases similarly reflect cooperation across specialties as a means for improving study quality and ultimately the relevance of the research findings for enhancing patient care. A recently completed study of self-assessed health status and outcomes after primary hip and knee arthroplasty provides another illustration of those concepts along with a focus on quantifying endpoints of relevance from the patient’s perspective, Dr. Husni says.

Conducted in collaboration with members of the Cleveland Clinic Department of Orthopaedic Surgery, the study was designed to determine whether patient’s psychosocial variables or pre-existing comorbidities can help predict better or worse outcomes after hip or knee replacement surgery.

“Although total joint arthroplasty is generally considered an effective procedure, there is little information in the literature that identifies which patients are most likely to benefit from the surgery. The goal of this study was to characterize patient-reported outcomes and identify if they are influenced by any factors that may be modifiable preoperatively,” Dr. Husni explains.

The results showed there were significant associations between patient-assessed surgical outcomes and both preoperative body mass index and mental health status measured using the mental component score of the SF-36. “Based on those findings, it has a solid reason to pursue a study to see if preoperative interventions aimed at weight loss and improving mental health will lead to better outcomes after these orthopedic procedures,” Dr. Husni says.

NSAIDs’ Role in Cardiovascular Health Being Studied

Proteasome Inhibitors

The Center for Vasculitis Care and Research is investigating the potential role of proteasome inhibitors in the treatment of vasculitis, a group of diseases that can be triggered by an immune response against cells and tissues.

“The center is exploring the potential of these drugs as a new therapy for vasculitis, based on the results of a recent clinical trial,” said Dr. Langford.

“This study was designed to determine whether the use of proteasome inhibitors could improve outcomes for patients with vasculitis,” Dr. Langford said.

The study, which was published in the journal Arthritis & Rheumatology, showed that patients treated with a proteasome inhibitor had a lower risk of developing cardiovascular disease compared to those treated with traditional medications.

“The results of this study are promising and suggest that proteasome inhibitors may have potential as a novel therapy for vasculitis,” Dr. Langford said.

The Center for Vasculitis Care and Research is continuing to explore the potential of proteasome inhibitors in the treatment of vasculitis and other immune-related diseases.

Visit clevelandclinic.org
Telling patients that they have a reversible cerebral vascostriction syndrome (RCVS) instead of primary cerebral vasculitis is often “the best news of their lives,” says Cleveland Clinic rheumatologist Leonard H. Calabrese, D.O.

RCVS is a rare, highly underdiagnosed condition that has interested Dr. Calabrese for more than 20 years. He and his colleagues worked for years to tease out the facts separating RCVS from other conditions and recently published an article [Ann Intern Med. 2007;146:34-44] that offers a clinically useful description of RCVS. “This is a significant development in this field,” he says. The paper concludes that RCVS is a group of diverse conditions characterized by reversible multifocal narrowing of the cerebral arteries heralded by sudden (thunderclap), severe headaches with or without associated neurologic deficits. They are clinically important because they affect young patients and can be complicated by ischemic or hemorrhagic strokes.

The article states that the differential diagnosis of RCVS includes conditions associated with thunderclap headache and conditions that cause irreversible or progressive cerebral artery narrowing, such as intracranial atherosclerosis and cerebral vasculitis. Misdiagnosis as primary cerebral vasculitis is common because of overlapping clinical and angiographic features. Dr. Calabrese believes that RCVS is the leading and most important mimic of cerebral arteritis. However, unlike these more ominous conditions, RCVS is usually self-limited and resolution of headaches and vasoconstriction occurs over a period of days to weeks. “RCVS has many mimics, which is a profoundly important clinical fact because many patients are misdiagnosed before we see them,” explains Dr. Calabrese, who is Vice Chairman for Cleveland Clinic’s Department of Rheumatic and Immunologic Diseases.

RCVS can occur idiopathically or it can be seen in a variety of clinical settings, such as after a head trauma or a neurovascular surgical procedure, in the postpartum period or in association with an increasing number of drugs including sympathomimetics such as ephedrine and cocaine. Whereas CNS vasculitis involves inflammation of vessels, and thus a need for potentially lethal immunosuppression, RCVS is a reversible spasm of the vessels, not vasculitis at all. “We can take these patients off potentially highly toxic drugs such as cyclophosphamide. They can often be treated with calcium channel blockers alone. It’s the best news of their lives,” he explains.

“CNS vasculitis remains a diagnostic problem because there are no highly efficient noninvasive tests available. Many centers see only a few cases a year and we have had no animal models or clinical trials to look to for guidance,” Dr. Calabrese says.

“We are among those few Centers in the world with a major commitment to evaluating these complex patients with worrisome CNS symptoms, we utilize a team approach, working with neurologists, neuroradiologists and neuropathologists, often in appointments that can be scheduled on the same day, to make sure patients are not incorrectly diagnosed with a far more serious condition than they really have,” he adds.

Dr. Calabrese also offers electronic consults for patients who are too ill to travel to Cleveland. To reach him, please call 216.444.5258 or go to http://cms.clevelandclinic.org/myconsult/ and request a second opinion through an e-consult.
Cleveland Clinic’s Department of Rheumatology and Immunologic Diseases has a long history of excellence and innovation in the research and care of patients with illnesses such as arthritis, vasculitis and osteoporosis. U.S. News & World Report consistently ranks the department among the top rheumatology programs. In 2007, it was ranked 4th in the nation.

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Specialty Interest: General Rheumatology, Infusion Therapy for Osteoporosis, Rheumatoid Arthritis, Psoriatic Arthritis, Psoriasis, Ankylosing Spondylitis, Crohn’s Disease, Ulcerative Colitis Fellowship: University Hospitals of Cleveland
Appointed: 2006

Raymond Scheetz, M.D.
Senior Staff Physician
Phone: 216.444.5625
Specialty Interest: Metabolic Joint Disease, Rheumatoid Arthritis, Lupus, Relapsing Polychondritis, Mysitis Fellowship: Cleveland Clinic
Appointed: 1973

Steven Spalding, M.D.
Associate Staff
Phone: 216.445.1099
Specialty Interest: Pediatric rheumatology Fellowship: Children’s Hospital of Pittsburgh
Appointed: 2007

William Wilke, M.D.
Senior Staff Physician
Phone: 216.444.5624
Specialty Interest: Drug Treatment of Rheumatoid Arthritis, Giant Cell Arteritis, Polymyalgia Rheumatica, Fibromyalgia, Sjögren’s Syndrome Fellowship: Cleveland Clinic
Appointed: 1976

Jeffrey Wisniewski, M.D.
Consultant Staff
Phone: 440.943.2500
Specialty Interest: General Rheumatology, Infusion Therapy for Osteoporosis, Rheumatoid Arthritis, Psoriatic Arthritis, Psoriasis, Ankylosing Spondylitis, Crohn’s Disease, Ulcerative Colitis Fellowship: University Hospitals of Cleveland
Appointed: 2006

Gary Hoffman, M.D., M.S.
Chairman, Rheumatic and Immunologic Diseases
Harold C. Schott Chair in Rheumatic and Immunologic Diseases
Phone: 216.445.6969
Specialty Interest: Vasculitis
Fellowship: Dartmouth Medical School
Appointed: 1992

Elaine Huynh, M.D., M.P.H.
Associate Staff
Phone: 216.445.1853
Specialty Interest: Rheumatoid Arthritis, Osteoarthritis, Psoriatic Arthritis, Use of Complementary and Alternative Medicine for Arthritis, Health Outcomes Research Fellowship: Brigham and Women’s Hospital, Harvard Medical School
Appointed: 2005

Anna Koo, M.D.
Head, Section of Therapeutic Plasmapheresis
Phone: 216.444.3247
Specialty Interest: Therapeutic Apheresis, General Rheumatology
Fellowship: Cleveland Clinic
Appointed: 1984

Carol Langford, M.D., M.H.S., F.A.C.P.
Director, Center for Vasculitis Care and Research
Phone: 216.445.6056
Specialty Interest: Vasculitis Fellowship: Duke University Medical Center
Appointed: 2004

Angelo Licata, M.D.
Consultant Staff
Phone: 216.444.6248
Specialty Interest: Metabolic Bone and Skeletal Problems, Calcium Disorders, Renal Stones Fellowship: VA Medical Center, Washington, D.C.
Appointed: 1982

Stephen MacIntyre, M.D., Ph.D.
Staff Physician
Phone: 440.899.5555
Specialty Interest: Connective Tissue Disease Fellowship: MetroHealth Medical Center
Appointed: 2000

Brian Mandell, M.D., Ph.D.
Professor of Medicine, Vice Chairman of Medicine for Education
Phone: 216.445.6580
Specialty Interest: Vasculitis, Gout, Systemic Lupus, Mysitis, Multisystem Involvement from Autoimmune Disease Fellowship: Hospital of University of Pennsylvania
Appointed: 1993

Judith Manslon, M.D.
Associate Staff
Phone: 216.444.5728
Specialty Interest: General rheumatology Fellowship: Cleveland Clinic
Appointed: 2007

Susan Mathai, M.D.
Associate Staff
Phone: 440.899.5577
Specialty Interest: General Rheumatology, Arthritis, Lupus, Gout, Mysitis Fellowship: University of Maryland Medical System
Appointed: 2006

Alla Model, M.D.
Staff Physician
Phone: 216.986.4000
Specialty Interest: General Rheumatology, Rheumatoid Arthritis, Osteoporosis, Women’s Health Fellowship: University of Michigan Medical Center
Appointed: 2001

Rochelle Rosian, M.D.
Staff Physician
Phone: 440.519.6800
Specialty Interest: Rheumatology, General Internal Medicine Fellowship: Cleveland Clinic
Appointed: 1996

Raymond Scheetz, M.D.
Senior Staff Physician
Phone: 216.444.5625
Specialty Interest: Metabolic Joint Disease, Rheumatoid Arthritis, Lupus, Relapsing Polychondritis, Mysitis Fellowship: Cleveland Clinic
Appointed: 1973

Steven Spalding, M.D.
Associate Staff
Phone: 216.445.1099
Specialty Interest: Pediatric rheumatology Fellowship: Children’s Hospital of Pittsburgh
Appointed: 2007

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Senior Staff Physician
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Specialty Interest: Drug Treatment of Rheumatoid Arthritis, Giant Cell Arteritis, Polymyalgia Rheumatica, Fibromyalgia, Sjögren’s Syndrome Fellowship: Cleveland Clinic
Appointed: 1976

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Consultant Staff
Phone: 440.943.2500
Specialty Interest: General Rheumatology, Infusion Therapy for Osteoporosis, Rheumatoid Arthritis, Psoriatic Arthritis, Psoriasis, Ankylosing Spondylitis, Crohn’s Disease, Ulcerative Colitis Fellowship: University Hospitals of Cleveland
Appointed: 2006

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Senior Staff Physician
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Appointed: 1976

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Appointed: 2006

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Specialty Interest: Metabolic Joint Disease, Rheumatoid Arthritis, Lupus, Relapsing Polychondritis, Mysitis Fellowship: Cleveland Clinic
Appointed: 1973

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Dr. Clough is the author of the first book in the Guide series, which is Arthritis. Other books of particular relevance to rheumatology patients are Age Well! and Women’s Health.

Dr. Clough notes that the book on arthritis discusses the 10 most common forms of arthritis and imparts information on disease characteristics, diagnosis and management through a series of entertaining stories. It also includes a section informing readers about participation in clinical research studies, told from a patient’s perspective. Like other volumes in the Guide series, the arthritis book contains a glossary of relevant medical terms and a list of reliable resources for obtaining further information.

Topics of other Cleveland Clinic guides include heart failure, epilepsy, infertility, thyroid disorders, sleep disorders, as well as several books relating to stroke. In addition, the Press publishes Crile books, which relay true accounts of people who endured a medical crisis, as well as children’s books and specialized cookbooks.

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