

John H. Stone, MD, MPH

Professor of Medicine, Harvard Medical School
The Edward A. Fox Chair in Medicine, Massachusetts General Hospital
Director, Clinical Rheumatology
Medical Director, Medical Infusion Center

I have had a career-long interest in teaching, research, and clinical care of patients with rheumatic diseases; i.e., inflammatory diseases mediated by patients' overly active immune systems. My work has focused on the systemic vasculitides and, more recently, on IgG4-related disease (IgG4-RD). Following medical school at Harvard Medical School, internal medicine training at Johns Hopkins, and a rheumatology fellowship at the University of California-San Francisco, I co-founded and directed the Vasculitis Center at Johns Hopkins University. This Center was the first in the United States to focus on inflammatory diseases of blood vessels such as ANCA-associated vasculitis and giant cell arteritis.

At Johns Hopkins, I directed the first NIH-funded, multi-center clinical trial in granulomatosis with polyangiitis (formerly Wegener's). The results of this trial were published in *The New England Journal of Medicine* (2005). This trial paved the way for subsequent trials and investigations in vasculitis on an international scale. Work at the Johns Hopkins Vasculitis Center blazed a path for physicians all over the world interested in vasculitis, encouraging them to focus on research in this area. This effort ultimately served as the impetus for dozens of clinical trials in these diseases that have led to substantially better treatments for patients in less than 20 years.

In 2008, I was recruited to become the Director of Clinical Rheumatology at the Massachusetts General Hospital (MGH), where I have continued my interest in vasculitis from the research standpoint and broadened my clinical scope to include the full breadth of rheumatology. I was the Co-Principal Investigator on the Rituximab in ANCA-associated Vasculitis (RAVE) trial, funded by the Immune Tolerance Network at the NIH. This trial led to two *New England Journal of Medicine* papers and changed the standard of care for remission induction in this disease. RAVE formed the basis of approval of rituximab (Rituxan) by the U.S. Food & Drug Administration (FDA), the European Medicines Agency (EMA) for remission induction in ANCA-associated vasculitis. The drug is now approved in more than 70 countries and as of 2017 at least 50,000 patients with ANCA-associated vasculitis had been treated with rituximab.

I am currently the global Principal Investigator of a multi-center clinical trial of interleukin-6 receptor (IL6R) blockade in giant cell arteritis. Giant cell arteritis is a disease that currently affects 300,000 Americans, and aside from prednisone there has been no other effective therapy known for nearly seventy years. The medication I have tested is known as tocilizumab (Actemra), and the trial is called GiACTA. This trial, conducted at 100 sites across North America and Europe, has also been highly successful, leading to a "breakthrough designation" for this drug by the FDA for giant cell arteritis and approval by the agency in 2017. The drug has also been approved in Europe for giant cell arteritis, and in Japan it is

approved for Takayasu's arteritis, a related form of vasculitis, as well – all on the strength of this one trial. The primary results of this trial were published in *The New England Journal of Medicine* (2017). The trial demonstrated for the first time ever the availability of an effective steroid-sparing approach to the treatment of giant cell arteritis.

I have written and edited a textbook of my own conception entitled *A Clinician's Pearls & Myths in Rheumatology* (Springer). This book involved a collaboration with 126 international experts in the rheumatic diseases whom I recruited and shepherded through the process of writing a new book. It will be time for a second edition in a couple of years.

My second major research interest pertains to an emerging disease, IgG4-RD. My group at the MGH has identified several new disease associations with IgG4-RD, including lymphoplasmacytic thoracic aortitis, eosinophilic angiocentric fibrosis, Riedel's thyroiditis, and midline destructive disease. My group also made the novel observation that B cell depletion with rituximab leads to swift, targeted declines in serum IgG4 concentrations (the other IgG subclasses remain stable), associated with dramatic clinical improvement. I was the first author on an *NEJM* Mechanisms of Disease paper in 2012 entitled "IgG4-Related Disease" and the senior author on a *Lancet* review (2014). I was the Principal Investigator on an NIH-funded R13 grant to conduct the world's first International Symposium on IgG4-RD (2011). I have subsequently organized the second and third International Symposia, as well (2014, 2017). I am the Principal Investigator in an NIH-funded Autoimmunity Center of Excellence (ACE), funded through 2024. The two focuses of this work are IgG4-RD and giant cell arteritis.

Finally, a burgeoning research interest in the last couple of years pertains to the measurement and prevention of steroid toxicity. Steroids remain the cornerstone of treating many immune-mediated diseases, but their toxicities are well-known and generally reviled by physicians and patients alike. I organized an international group of sub-specialty experts to create a Glucocorticoid Toxicity Index (GTI), designed for use as an outcome measure in clinical trials. My group has created app versions of this instrument for use in both adult and pediatric patients. The GTI 2.0 App was recently used as the most important secondary outcome measure in a trial of a complement inhibitor in ANCA-associated vasculitis.

Over the span of my career, I have had the privilege of participating in the transition of treatment for patients with inflammatory diseases – rheumatoid arthritis, lupus, vasculitis, and many more – out of the Dark Ages of limited therapeutic options with toxic side-effects, into an era of safe, highly effective medications. It has been enormously gratifying to participate in the great progress to date. Anticipating a quickening of the pace of progress!

Professor Eugen Feist

Biography

Professor Eugen Feist studied medicine at the Institute of Medicine, Kiev, Ukraine, and the Charité, Humboldt-University of Berlin, Germany, from 1989 to 1995. He became a Consultant in Internal Medicine at the Department of Internal Medicine and Rheumatology at the Charité-Universitätsmedizin, Berlin in 2003, and two years later he was appointed as a Rheumatologist. Professor Feist's clinical work and research activities are focused on systemic autoimmune and autoinflammatory diseases, with special interests in rheumatoid arthritis and adult onset Still's disease. **He has been awarded the MSD grant for Arthritis and the Wolfgang Schulze prize of the Deutsche Rheuma-Liga.** In 2009, he received a postdoctoral lecture qualification for his work on the topic of proteasomes and autoimmunity. Since 2019, Professor Feist is medical director of the Helios Clinic for Rheumatology in Vogelsang-Gommern, a leading center in Saxony-Anhalt. He has acted as Investigator in numerous phase I to IV clinical studies in the field of rheumatology.

CURRICULUM VITAE ROBERTO GIACOMELLI MD, PhD

NAME Roberto Giacomelli
TITLE Full Professor of Rheumatology
NATIONALITY Italian

EDUCATION

1981 Graduation in Medicine
University of Rome "La Sapienza", Rome, Italy

1986 Trained in "Internal Medicine"
University of Rome "La Sapienza", Rome, Italy

1989 PhD Fellowship in "Pediatric Physiopathology and Clinical Immunology"
University of Rome "La Sapienza", Rome, Italy
1990-98 Clinical Assistant, Clinica Medica, University of L'Aquila, School of Medicine,
L'Aquila, Italy

1991 Fellowship Institute of Clinical Immunology, Karolinska Institute, Stockholm,
Sweden

1997/1998 Fellowship Rheumatology and Laboratory Units,
Medical College of Ohio, Toledo, Ohio

1998 Assistant Professor of Internal Medicine
University of L'Aquila, School of Medicine, L'Aquila, Italy

2001 Associate Professor of Internal Medicine
University of L'Aquila, School of Medicine, L'Aquila, Italy

2005 Full Professor of Rheumatology
University of L'Aquila, School of Medicine, L'Aquila, Italy

2005- 2020 Chief of Immuno-Rheumatology Clinical Unit-University of L'Aquila, School of
Medicine, L'Aquila, Italy

2020 - Chief of Immuno-Rheumatology Clinical Unit-University of Rome "Campus biomedico" school of Medicine, Rome, Italy

AFFILIATION

Registration at the professional roll of Doctors-Surgeons of Rome (Italy).

Member of the Italian Society of Allergy and Immunology.

Member of the Italian Society of Rheumatology.

Member of Italian Society of Stem Cell Research.

President of the Gruppo Italiano per la Ricerca in Reumatologia Clinica e Sperimentale (GIRRCs)

Convenor of the EULAR-Task Force on Adult onset Still's disease

REFEREE FOR:

J Rheumatol
Annals Rheumatic Diseases
Clin Exp Rheumatol
Plos One
Arthritis and Rheumatism
Arthritis Research and Therapy
Seminars in arthritis and Rheumatism
Autoimmunity Reviews
Lancet
Frontiers in Immunology
Exp. Rev. Clin. Immunology
New England Journal of Medicine
Nature Medicine
Nature review in Rheumatology

ACADEMIC AWARDS

1987: Top academic award Associazione Italiana Patologi Clinici XXXVII Congresso Nazionale for the paper: "Interferenza farmacologica 'in vitro' sull'aderenza batterica agli spermatozoi"

1989: Academic award Società Italiana di Medicina Interna 89° Congresso Nazionale (Bologna 3-6 Novembre 1988) for the paper: "Abnorme espansione dei 'Large Granular Lymphocytes': analisi fenotipica e funzionale di 1 caso"

1998 Gruppo Italiano per la Lotta alla Sclerodermia (GILS) Academic award for the studies on the pathogenesis of Systemic Sclerosis

RESEARCH FIELDS

Impairment of angiogenesis and vasculogenesis during Systemic Sclerosis (SSc).

Study of anatomical and functional integrity of endothelial monolayer in physiological conditions.

Study of stem cells (Endothelial Progenitor Cells (EPCs) and Bone Marrow-derived mesenchymal stem cells) in the replacement of affected tissues in autoimmune diseases.

Stem cells transplant in autoimmune diseases.

Alteration in T and B cells response in autoimmune diseases.

Cardiovascular and metabolic complications in rheumatoid arthritis (RA).

Study of the pathogenic mechanisms of the pathology and its complications, mainly the macrophage activation syndrome in adult onset Still's disease (AOSD).

Evaluation of prognostic factors in predicting long-term outcome and identification of disease activity in AOSD.

Research and optimization of new therapeutic strategies in AOSD.

Study of the pathogenic mechanisms of Sjogren's syndrome (pSS).

Research of new therapeutic strategies in pSS.

SCIENTIFIC PRODUCTION

Author of n. 288 scientific papers; H index 50; 8987 total citations (WOS)

Prof. Augusto Vaglio

Education

1988-1993 Scientific Liceo "A. Vallone" Galatina (LE) (final mark 60/60),

1994-2000 Medical School, University of Parma Italy (final mark 110/110 magna cum laude)

2000-2005 Post-graduate School of Nephrology (final mark 50/50 magna cum laude),
University of Parma, Italy

2005-2006 Post-doctoral fellowship, Lowance Center for Human Immunology, Emory
University, Atlanta, USA

2006-2009 PhD in Nephrology, University of Parma, Italy

TEACHING

2005-2018 Professor at the Post-Graduate Nephrology School, Parma University

2012-2018 Adjunct Professor, Parma University School of Medicine

2013-date Professor at the PhD program in Health Sciences, Medical School, Parma
University

June-July 2017 Visiting Professor, Department of Medicine, University of Cambridge, UK

2018-date Associate Professor of Nephrology, University of Firenze

2019-date Director, Post-graduate fellowship program in nephrology, University of
Firenze

CURRENT POSITION

Associate Professor of Nephrology, University of Firenze, and Consultant Nephrologist, Meyer
Children's Hospital, Firenze

RESEARCH AREAS

- ANCA-associated vasculitis
- Retroperitoneal fibrosis and IgG4-related disease
- Erdheim-Chester disease
- Systemic lupus erythematosus

Helen J Lachmann MD FRCP FRCPath

*Clinical Director UCL Division of Medicine & Clinical Lead for National Amyloidosis Centre,
University College London, Royal Free London NHS Foundation Trust, London, UK*

Helen Lachmann is a Professor and Honorary Consultant Nephrologist at UCL and the Royal Free London NHS Foundation Trust. She trained in medicine at the University of Cambridge and at University College London. In 1999, following postgraduate training in internal medicine and nephrology, she started her research at the UK National Amyloidosis Centre. She has published widely and her main scientific interests are focused on the genetics and management of the systemic autoinflammatory diseases and the phenotypic characterization and treatment of acquired and hereditary forms of systemic amyloidosis.