1. Clinical Rheumatology Training Track

A 2-year ACGME accredited training track for rheumatologists committed to a career in clinical practice (or as an academic clinician scholar) leading to a board eligibility in Rheumatology after the 2 years of fellowship.

Featured Clinical Activities

Clinics:

- UCSD General Rheumatology Continuity Clinic
- VA Medical Center General Rheumatology Continuity Clinic
- UCSD Ultrasound Clinic
- Pediatric Rheumatology Clinic (Rady Children's Hospital)
- Electives in endocrine/metabolic bone disease, joint dermatology-rheumatology and lupus nephrology-rheumatology clinics, and advanced-interventional musculoskeletal ultrasound

Teaching conferences

- Rheumatology Grand Rounds and Case Conferences
- Rheumatology Journal club
- Rheumatology San Diego City-Wide Teaching Conference (with Scripps program and the San Diego Rheumatology Community)
- Core curriculum conferences
- Formal Ultrasound Curriculum Conferences enhanced with hands on sessions
- Rheumatology-Radiology Teaching Rounds
- Immunology school
- Inter-Disciplinary Conferences

2. Academic Rheumatology 3-year Clinical-Translational Rheumatology Research Training Track

- Board eligibility after 2 years of training employing most of the same array of clinical training activities in the clinical track
- Often coupled with a NIH T32-supported training program to given an opportunity for the 3rd year of training, https://medschool.ucsd.edu/som/medicine/divisions/rai/fellowships/T32/Pages/default.aspx
- During the 2nd year fellows schedules are attuned to their individual scholarly activity and research needs
- Clinical and translational research testing of novel therapies at the <u>Center for Innovative Therapy</u> including biologics and other forms of immune modulation, or at the VA and other sites offers training in HSR&D, clinical trials, and outcomes research
- During the 3rd year fellows are presented an opportunity to get experience and transition to clinical educator role
- Formal training in clinical and translational research and epidemiology is offered through NIH
 Sponsored CREST program at UCSD ACTRI,
 https://medschool.ucsd.edu/research/actri/education/crest-program/Pages/default.aspx
- Advanced degrees such as MAS or MPH are available and are offered in conjunction with San Diego State University of Public Health

3. Basic-Translational Rheumatology Research Track

 Board eligibility after 2 years of training employing most of the same array of clinical training activities in the clinical track

- During the 2_{nd} year fellows schedules are attuned to their individual scholarly activity and research needs
- Often coupled with a NIH T32-supported training program to given an opportunity for the 3rd year of training, https://medschool.ucsd.edu/som/medicine/divisions/rai/fellowships/T32/Pages/default.aspx
- Can be integrated with the UCSD Physician Scientist Training Pathway (PSTP), https://medschool.ucsd.edu/som/medicine/education/residency/physician-scientist/Pages/default.aspx
- Specialized Research Training Courses in Ethics and Grantsmanship for his Track
- Specialized Rheumatology Research Journal Club and Affinity group meetings

Examples of training opportunities include work with these mentors:

Clinical research

Arthur Kavanaugh Spondyloathropaties, Clinical trials, Outcome research

Ken Kalunian Lupus, Clinical trials, Outcome research in SLE

Gary Firestein Rheumatoid arthritis

Robert Terkeltaub Gout and crystal arthropathies

Nunzio Bottini Scleroderma

Monica Guma Dietary influences in rheumatic diseases

Arnold Ceponis Interventional rheumatology, musculoskeletal ultrasound

Innate Immunity, Inflammation, Connective Tissue Biology:

Gary Firestein RA Synovial Biology, Kinase Signaling, Epigenetics

Michael Karin Inflammation Transcriptional Signaling

Mark Ginsberg Inflammation Biology and Signaling, Leukocyte Adhesion and Trafficking, Angiogenesis

and Vascular Biology in Rheumatic Disease

Dennis Carson Member: Institute of Medicine, National Academy of Sciences; TLR Innate Immunity in

Translational Immune Modulation, Purine Metabolism in Immunology, Nanotechnology

Jack E Dixon Member: National Academy of Sciences; Fam20 Secreted Protein Kinases in Arthritis,

Mitochondrial Biology in Connective Tissue Disease

Hal Hoffman Inflammasome Biology and Pediatric Autoinflammatory Diseases

Robert Terkeltaub Interfaces between Inflammation and Connective Tissue Biology,

Crystal Arthropathies

Eyal Raz Mucosal Immunity, Innate Immunity, Translational Immune Tolerization for SLE and RA

Maripat Corr Innate Immunity in Arthritis, Wnt Signaling in Rheumatic Disease

Paul Insel Mechanisms of Fibrosis

Monica Guma Inflammation Signal Transduction, Microbiome in rheumatic disease

Ru Liu-Bryan Inflammation Modulation and Metabolic Regulation of Inflammation in Cartilage

Disease

Adaptive Immunity:

Dennis Carson B cell biology, and life and death mechanisms, Immune tolerance, immunization and

adjuvanticity

_Nunzio Bottini T cell signaling, T cell Phosphatases, Nanotechnology Maripat Corr Adaptive Immunity in RA, SLE, and Spondyloarthropathy

Mark Ginsberg B and T cell trafficking and activation

Joseph Cantor B Cell Signaling, CD96

Mentors based nearby in the La Jolla research community, including

Mitch Kronenberg Director, LIAI - Antigen Presentation, NK and iNKT cells Mick Croft LIAI - T cell biology, Translational Immune Tolerance

Klaus Ley LIAI - T cell Immunity in Atherosclerosis)

Carl Ware Sanford-Burnham - TNF superfamily, Autoimmunity, Viral Immune Evasion in

Rheumatic Diseases

Allergic inflammation:

David Broide Lung inflammation and tissue remodeling, Mast Cells

Bruce Zuraw Kinins, Angioedema Seema Aceves Eosinophilic Inflammation

Taylor Doherty TNF superfamily in lung inflammation

Basic Mechanisms and Translation in Pediatric and AutoinflammatoryRheumatic Diseases:

Hal Hoffman Inflammasome Biology and Pediatric Autoinflammatory Diseases

Jane Burns Kawasaki's Disease Pathophysiology and Immune Modulation Based Therapy

Lori Broderick Autoinflammatory Diseases, based in the Hal Hoffman lab group