

## CURRICULUM VITAE

Félix Fernández-Madrid, M.D., Ph.D., F.A.C.P.

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Department of Internal Medicine  
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### EDUCATION

1966 Ph.D.- Physiology, Cellular and Molecular Biology, University of Miami, Coral Gables, Florida  
1953 M.D.- University of Buenos Aires, Buenos Aires, Argentina  
1946 Colegio Nacional de San Isidro, "Bachiller", Buenos Aires, Argentina

### TRAINING

1961-1966 Graduate Student. Cellular and Molecular Biology  
PhD Program University of Miami Graduate School, Coral Gables, FL  
1960-1961 Rotating Internship, Bristol Hospital, Bristol, Connecticut  
1957-1960 Trainee in Pediatric Cardiology and Rheumatic Diseases, Chief, Dr. Rodolfo Kreutzer, Children's Hospital, Buenos Aires, Argentina  
1956-1957 Trainee in Internal Medicine, Department of Internal Medicine, Chief, Dr. Arturo Heidenreich, Hospital Argerich, Buenos Aires, Argentina  
1954-1956 Medical Resident, Internal Medicine, Sala 4 Hospital de Clínicas (University Hospital), Buenos Aires, Argentina  
1951-1952 Resident, Emergency Medicine Service, Military Hospital, Buenos Aires, Argentina  
1951-1953 Extern, Emergency Medicine and Surgery Service, Hospital Rawson, Buenos Aires, Argentina

### FACULTY APPOINTMENTS

**1972- Professor of Internal Medicine, Wayne State University, School of Medicine, Detroit, Michigan**

- 1997- **Associate, Center for Molecular Medicine and Genetics  
Wayne State University, Detroit, Michigan**
- 1972- Associate in Biochemistry, Wayne State University
- 1968-1999 Chief, Division of Rheumatology and Clinical Immunology, Wayne State University, School of Medicine, Detroit, MI
- 1968-1972 Associate Professor of Internal Medicine, Wayne State University
- 1967-1968 Assistant Professor, Medicine and Physiology, University of Miami, School of Medicine, Coral Gables, Florida
- 1954-1956 Instructor, Medicine, Hospital de Clínicas (University Hospital) Buenos Aires, Argentina

#### **HOSPITAL OR OTHER PROFESSIONAL APPOINTMENTS**

- 1986-1999 Director, Center for Rheumatic Diseases, Hutzel Hospital, Detroit, Michigan
- 1976-1997 Chief, Rheumatology Section, Harper Hospital, Detroit Michigan
- 1976-1990 Chief, Rheumatology Section, Rehabilitation Institute Detroit, Michigan
- 1965-1968 Visiting investigator, Howard Hughes Medical Institute. Coral Gables, Florida

#### **MAJOR PROFESSIONAL SOCIETIES**

- 1996- **Karmanos Cancer Institute (Member, breast cancer program)**
- 1997- International Society for Preventive Oncology**
- 1989-2000 Association of Subspecialty Professors
- 1980- Detroit Medical Academy of Medicine/Medical Club
- 1975- Lupus Foundation
- 1972- **American College of Physicians, Fellow**
- 1972- American College of Rheumatology, Fellow**
- 1972- Sjögren's Foundation
- 1970- New York Academy of Sciences
- 1968- Arthritis Foundation
- 1968- American Association for the Advancement of Science
- 1968- Michigan Rheumatism Society

#### **LICENSURE AND BOARD CERTIFICATION**

- 1986 Diplomate, A.B.I.M. Subspecialty Board in Rheumatology .

1984                   Diplomate, American Board of Internal Medicine  
1969                   Licensure from State of Michigan, No. 031283  
                          Physician Licence permanent ID 4301031283  
                          DEA Registration number AF5508037  
  
                          Board of Pharmacy, permanent ID 4301031283

### **HONORS/AWARDS**

**2005                   Wayne State University School of Medicine Teaching Award**

2000                   Wayne State University School of Medicine Teaching Award.

1999                   Wayne State University Teaching Award

1998                   Wayne State University School of Medicine Service Award

1997                   Lifetime Fidelitas Award from the Lupus Foundation

1988-1991            Member, Special Grants Study Section, NIH

1986                   Lawrence M. Weiner Research Award, WSU Alumni Association

1976                   President, Michigan Rheumatism Society

1963                   NIH Trainee in Molecular Biology at Woods Hole  
                          Marine Laboratory, Woods Hole, Massachusetts

1961-1965            Howard Hughes Fellow, Cellular and Molecular Biology, University of Miami,  
                          Coral Gables, Florida

1952-1954            Internship, Hospital de Clínicas (University Hospital), Buenos Aires,  
                          Argentina (Awarded to 12 of 5000 medical students)

**SERVICE/TEACHING**

**1. a) Supervision of Fellow's Rheumatology Clinic (1/2 day per week) .**

**b) In-patient practice, three months per year (teaching and consultation rounds in the Rheumatology Service)**

**2. Ad Hoc Journal/Editorial Activity (11 manuscripts reviewed during 2006)**

American Journal of Medicine  
American Journal of Hematology  
Arthritis Research Campaign (England)  
**Biochem Biophys Acta**  
**Cancer Detection and Prevention**  
**Clinical Immunology**  
**European Journal of Cancer**  
Institute for Health Science (Germany)  
**Journal of Immunology**  
**Journal of Rheumatology**  
**Osteoarthritis and Cartilage International**  
Seminars Arthritis Rheumatism  
Geriatría Práctica (Argentina)  
Jordan Medical Journal (Amman, Jordan)  
**Proteomics**

**3. Professionally Related Service**

1981 - 1991 Chairman, Harper Hospital Trust Fund  
1992 – 1993 President, Detroit Medical Club  
2007- President Elect, Detroit Medical Academy of Medicine

**4. State and National Boards and Committee**

**2006** Reviewer, Department of Defense. Breast Cancer Research Program, Molecular Biology & Genetics, MBG-3 (signal transduction)  
**2007** Reviewer, Department of Defense. Breast Cancer Research Program, Molecular Biology & Genetics, MBG-3 (signal transduction)

**2002-2004** Arthritis Foundation, Medical and Scientific Committee  
1968 - 1995 Arthritis Foundation, Medical and Scientific Committee  
1993 -1995 Chairman, Michigan Arthritis Foundation, Medical and Scientific Committee  
1991-2002 External Advisor, University of Michigan, Multipurpose Arthritis Center  
1994-1997 Member, National Arthritis Advisory Committee, Food and Drug Administration

1997-	Consultant, National Arthritis Advisory Committee, Food and Drug Administration, Bethesda, MD
1988 - 1991	Member, Special Grants Study Section, NIH
1968 - 2001	VA Central Grants Committee, Ad hoc Reviewer
1991-2000	NIH, Reviewers Reserve
1978-1979	Chairman, Program Committee, Michigan Chapter, Arthritis Foundation
1978-1988	President, Medical Trust fund, Harper Hospital
1977-1985	Member, Board of the Lupus Foundation, Michigan Chapter
1979-1980	Chairman, Public and Patient Education Committee, Michigan Chapter, Arthritis Foundation
1990 - 1995	Member, State of Michigan Arthritis Plan Committee

### 5. Service to the University:

<b>2004-2006</b>	<b>School of Medicine Course Directors Committee</b>
1996- 97	Chairman, School of Medicine Salary Committee
1995- 97	President, Executive Committee Faculty Senate WSU School of Medicine.
1993 - 95	President elect, Executive Committee Faculty Senate, WSU School of Medicine.
1986-1992	Member, Executive Committee of the Faculty Senate, WSU School of Medicine.
1986-1992	Member, Promotion and Tenure Committee, WSU School of Medicine.
1995-1997	Member, Medical School Dean's Advisory Council
1996-1998	Member, Academic Affairs Advisory Council
1996	School of Medicine representative to Nominating Committee of WSU

### 6. Service to the Department of Internal Medicine

<b>2003-08</b>	<b>Elected member, Department of Internal Medicine Promotion and Tenure Committee</b>
1992-1993	Member, Practice Policy Committee.
1992-1999	Board Member, Affiliated Internists
1968-1999	Member, Division Heads Committee, Department of Internal Medicine, Wayne State University
1990-1991	Member, Review Advisory Panel, Department of Physical Therapy, Wayne State University.
1990-1991	Member, Finance Committee, University Internists
1988-1991	Member, Board of Directors, University Internists

### 7. Service to the DMC Hospital Committees:

1999- 2002	DMC Pain Advisory Committee
1998-2001	PSO Committee of the Detroit Medical Center
1998-1999	Save 100, Committee. DMC Rheumatology representative
1992-1994	Advisory Committee to the Gertrude Levine Pain Clinic.
1992-1995	Magnetic Resonance Imaging Committee, Harper Hospital
1990-1991	Quality Assurance Committee, Harper Hospital
1989-1991	Utilization Committee, Harper Hospital
1988-1992	Pharmacy and Therapeutics Committee, Harper Hospital.
1980-1981	President, Medical Staff, Rehabilitation Institute of Detroit

### **TEACHING:**

. Courses taught at Wayne State University:

a. **Undergraduate:**

**Multiple lectures on basic immunology, arthritis and connective tissues diseases**

b. **Graduate, School of Medicine**

**Pathophysiology Year II Course-Connective tissue Unit. (Course Director, 2004-6)**

**Physical Diagnosis to year II medical students (yearly at Harper or DRH)**

c. **Graduate Professional:**

Recent clinical rheumatology preceptorships. Dr Karim Taggaddos MD, PGY1; Dr Cong-Qiu Chu, MD, PGY2,

Board Review Course in Internal Medicine. SLE, Scleroderma and MCTD. OHEP Center for Medical Education.

**Core curriculum in Rheumatology: Yearly lectures and seminars on various topics, such as autoimmunity, autoantibodies, systemic autoimmune diseases, vasculitides, autoimmune paraneoplastic syndromes, antinuclear antibodies in cancer and the systemic autoimmune diseases, abnormalities of signal transduction in human disease, new modalities in the treatment of rheumatoid arthritis, Cox1/Cox2 inhibitors.**

**Detroit Medical Center Grand Rounds, multiple presentations.**

**Detroit Medical Center Clinical-Pathological Conferences, moderator**

**Rheumatology Teaching and Attending Rounds (3 mo./year)**

Professor Rounds, Detroit Medical Center.

**Rheumatology Grand Rounds, weekly (bed-side teaching)**

**Rheumatology Journal Club, weekly.**

**Pathology Conference, monthly.**

**Pediatric Rheumatology Conference, monthly**

Medical Grand Rounds at several hospitals in the Detroit Metropolitan area, such as Sinai-Grace, Oakwood, Mercy, and other DMC-affiliated sites or hospitals, periodically

Speaker, Annual Review Course of Internal Medicine at Harper Hospital .

Question reviewer of MKSAP for Rheumatology .

Presenter, Research Seminar, Department of Biochemistry, WSU

Guest Lecturer, The OSLER Institute. Orthopedic Board Review Course, Chicago, IL, Inflammatory arthropaties.

Guest Speaker, Seropositive Arthropathies. Topics on acute and chronic pain management. Gertrude Levin Pain Center. .

Guest Speaker, Coping with Autoimmune Diseases. American Association of Transcriptionists

Symposium chairman and speaker on Recent Therapies for Osteoarthritis and Rheumatoid Arthritis: Practicum for the Pharmaceutical Industry. 1999.

Guest speaker, Cox-1 and Cox-2 inhibitors. Presentation to DMC Pharmacists, 1999.

Presenter, Vasculitis, and the autoimmune diseases. Annual ABIM Review Course, Providence Hospital Southfield, MI.

Preceptorship for Pharmaceutical Industry (Rheumatoid Arthritis and Osteoarthritis. 1999..

Chair, and speaker on Recent Advances in the Therapy of Rheumatoid Arthritis and Osteoarthritis . One day symposium for Rheumatologists, internists and Family Physicians. Marriott, Troy, Michigan, May 7, 1999.

**4. Essays/Thesis/Dissertations directed:**

**2005- Research Advisor to Elizabeth Tsai MD. Second Year Resident from St John Hospital. Discovery of novel autoantigens in rheumatoid arthritis.**

**2005- Research Advisor to Dr Bo Tao MD from Dalian Madical University, Dalian, PR China.**

**Project on autoantibodies common to systemic autoimmune diseases and cancer**

- 2002-03 Research advisor for Dr Cong-Qiu Chu, MD (Second year medical resident). Searching for novel autoantigens in rheumatoid arthritis. A Genomic Approach. Dr Cong-Qiu Chu obtained a rheumatology fellowship at the University of Seattle, Washington.
- 2000-04 **Research advisor. Dr. Michael Moroianu, MD (Second year Fellow in Rheumatology, then Assistant Professor of Internal Medicine, WSU) Autoimmune phenomena shared by connective tissue diseases and cancer (see publication).**
- 2004-5 **Research Advisor. Dr Amar Majjhoo, MD 1<sup>st</sup> Year Rheumatology Fellow on Project on Biomarkers for Alzheimer's disease.**
- 2003 Research Advisor to Ms Tamara Augustin, Second Year Med Student on Project on Pathogenesis of Rheumatoid Arthritis.
- 1994 Research advisor. Inocencio Cuesta M.D. (Rheumatology fellow) V $\beta$  T-cell repertoire in RA.
- 1994 Research advisor. Jamal Stetieh M.D. (Rheumatology fellow). V $\beta$ -T cell repertoire in rheumatoid arthritis.
- 1994 Research advisor. Maria Laynes M.D. (Rheumatology fellow) Adoptive Transfer in experimental models of RA.
- Thesis advisor. Robert L. Karvonen, Ph.D. The isolation of procollagen mRNA and its translation in protein-synthesizing cell-free systems. Ph.D. Thesis, Wayne State University. Department of Biochemistry, 1978.  
Dr Karvonen PhD, became an Assistant Professor of Internal Medicine at Wayne State University and is presently the Director of the Birmingham Research Center.
- Research advisor. S. Frazer, M.D., (Rheumatology fellow) Collagen fibrillogenesis in osteoarthritis. 1987-1988.
- Research advisor. Charles Huebner, M.D. (Rheumatology fellow) 1988-89. Proteoglycans influence on collagen fibrillogenesis in osteoarthritis.
- Research advisor. Angelia.D. Mosley, M.D. (Rheumatology fellow) Long-standing alcohol abuse and chronic inflammatory polyarthritis. 1987.
- Research advisor. D.P. Mehta, M.D., and P. Collier, M.D., Azulfidine in the treatment of rheumatoid arthritis. 1988.
- Research co-advisor. John Tower, D.O. (Rheumatology fellow) Antiphospholipid antibodies in Autoimmune disease. 1989-1990.
- Research co-advisor. Neil Levitt, M.D. (Rheumatology fellow) 1991-1992. Immunotherapy with monoclonal antibodies.
- Research co-advisor. Imad Al-Azem, M.D. (Rheumatology fellow) 1991-1992. Immunoregulation of rheumatoid factor by CD8 T-lymphocytes.



Research advisor. Barbara Czelusnick, M.D. (Rheumatology fellow) 1991-1992.  
Anticollagen antibodies in lung cancer.

## ACTIVE GRANT SUPPORT

None in 2007

### Recent Grant Applications

**F. Fernandez Madrid PI. NIH. R01. Development and validation of a panel of breast cancer autoantigens for the early diagnosis of breast cancer. Submitted March 07. Not funded. Score 188.**

**F. Fernandez Madrid PI. NIH. RFA. 1U01CA128443. Antibodies to glycan antigens as biomarkers for the early diagnosis of breast cancer. Submitted, July 2006. Not Funded. Score 217.**

**F Fernandez Madrid PI. NIH-RO1.CA122277. Breast cancer autoantigens and mammographic screening in breast cancer diagnosis. Submitted, March 2006. Not funded. Score 238. Re-submitted , March 2007**

**F Fernandez Madrid PI. NIH-R03 Development of a panel of breast cancer autoantigens for the screening of breast cancer. \$250,000. Submitted August 1<sup>st</sup> 2006. Not funded**

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F. Fernández-Madrid, PI, NIH: R21 AR-99-128 (CA-87759-02). Autoantibodies to Nuclear Antigens as Markers of Breast Cancer. \$223,500. Funded. 3/1/01 – 2/28/03.

## PAST GRANT SUPPORT

1999            Fernández Madrid, F PI. Karmanos Cancer Institute. Replication Protein A in cancer related Autoimmunity. Funded \$35,000.

1996            Anticollagen antibodies in lung cancer. PI, M. Kraut. F. Fernández-Madrid, Co-investigator. (Funded) Virtual Discovery Grant Karmanos Cancer Institute, \$25,000 May 1, 1996.

1989            Sandoz, Symposium on the Pathogenesis of the Systemic Autoimmune Diseases, Dearborn, Michigan. F Fernandez Madrid, chairman. (Funded) \$8,000.

1989            Upjohn, Symposium on the Pathogenesis of the Systemic Autoimmune Diseases, Dearborn, Michigan. F Fernandez Madrid, chairman. Funded \$5,000.

1989            Ciba-Geigy, Symposium on the Pathogenesis of the Systemic Autoimmune Diseases. Dearborn, Michigan. F Fernández Madrid, chairman. (Funded) \$5,000.

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- 1989-1990 Department of Radiation Oncology Award. Effect of Radiation on the Immune response. PI: F. Fernández-Madrid. (Funded.) \$30,000.
- 1988-1989 Arthritis Foundation, Michigan Chapter – Collagen Fibrillogenesis in Osteoarthritis  
PI: F. Fernández-Madrid. (Funded) \$15,000.
- 1986-1987 Medical Staff Trust Fund. An Animal Model of Radiation Fibrosis. PI: F. Fernández-Madrid.. (Funded) \$15,000.
- 1986-1987 Medical Staff Trust Fund Cloning of Rheumatoid T Lymphocytes with Specificity for Human Immunoglobulin "G". PI: F. Fernández-Madrid, Co-PI: Barbara McIntosh.(Funded) \$5,000
- 1986-1987 Arthritis Foundation, Michigan Chapter, "Collagen Fibrillogenesis in the pathogenesis of Osteoarthritis". PI: F. Fernández-Madrid. (Funded) \$10,000.
- 1979-1980 Rorer Pharmaceuticals. Double blind trial of aspirin combined with antacid and placebo in the prevention of induced gastro-intestinal symptoms PI: F. Fernández-Madrid, (Funded) \$75,000.
- 1979-1980 Harper Hospital Trust Fund - The Role of Ascorbic Acid in Procollagen Synthesis and Secretion. PI: F. Fernández-Madrid. (Funded). \$ 8,000.
- 1979 Medical Trust Fund of Harper Hospital – Double blind trial of aspirin combined with antacid and placebo in the prevention of induced gastrointestinal-symptoms. PI: F. Fernández-Madrid.(Funded) \$5,000.
- 1978-1981 Arthritis Foundation, Michigan Chapter - The Role of Ascorbic Acid in Procollagen Synthesis and Secretion. PI, F Fernández Madrid, \$ 32,000 (Funded)
- 1978-1981 VA Merit, Ascorbic Acid in the Synthesis and Secretion of Connective Tissue Components.(Funded).\$112,000.
- 1973-1976 VA Merit Award. PI: F. Fernández-Madrid. – Biosynthesis of Collagen. (Funded). \$68,383 per year.
- 1972-74 Michigan Chapter, Arthritis Foundation – PI: F. Fernández-Madrid. Metabolic Studies in Scleroderma.(Funded). \$25,000.
- 1966-1971 R01, PI: F. Fernández-Madrid. NIH Collagen Synthesis on Polyribosomes – \$210,000. (funded).

## PUBLICATIONS

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Original observations in refereed journals (Bolded names are from graduate or medical students or from research trainees)

**Fernández Madrid, F. Autoantibodies. In: Cancer Encyclopedia, M. Schwab, Ed. Elsevier Science, In Press, 2007.**

**Fernández Madrid, F. Autoantibodies in breast cancer sera: candidate biomarkers and reporters of tumorigenesis. Cancer Letters. 230: 187-198, 2005.**

**Fernández Madrid F., Karvonen RL., Ensley J., Kraut M., Granda JL., Alansari H., Tang N. and Tomkiel JE. Spectra of antinuclear antibodies in patients with squamous cell carcinoma of the lung and of the head and neck. Journal of Cancer Detection and Prevention. 29: 59-65, 2005.**

**Fernández Madrid, F, Tang, N, Alansari, H, Karvonen, RL, Tomkiel, JE. Improved approach to identify cancer-associated autoantigens. Autoimmunity Reviews 4: 230-235, 2005.**

**Fernández Madrid, F., Tang, N., Alansari, H., Granda, J.L., Amirikia, K.C., Tait, L., Moroianu, M. and Karvonen, R.L. Autoantibodies to annexin XI and other autoantigens in the diagnosis of breast cancer. Cancer Research, 64: 5089-5096, 2004.**

**Wiese, W., Alansari, H., Tranchida, P., Fernández Madrid, F. Paraneoplastic Polyarthritits in an Ovarian Teratoma. The Journal of Rheumatology, 31: 1854-1857, 2004.**

Tomkiel, JE, Alansari, H., Tang, N., Virgin JB., Yang X., VandeVord P, Karvonen, R.L., Granda J.L., Kraut M.J., Ensley, J., Fernández-Madrid F. Autoimmunity to the M<sub>r</sub> 32,000 Subunit of Replication Protein A in Breast Cancer. Clinical Cancer Research, 8: 752-758, 2002.

Fernández-Madrid, F., VandeVord, P.J., Yang, X., **Karvonen, R.L.**, Simpson, P.M., Kraut, M.J., Granda, J.L. and Tomkiel, J.E. Antinuclear Antibodies as Potential Markers of Lung Cancer. Clinical Cancer Research. 5:1393-1400, 1999.

Karvonen R. L., Miller, P.R., Nelson, D.A., Granda, J. L., and Fernández-Madrid, F. Periarticular Osteoporosis in Osteoarthritis of the Knee. Journal of Rheumatology 25:2187-2194, 1998.

**Cuesta, I.A.**, Sud, S., Song, Z., **Affholter, J.A.**, **Karvonen, R.L.**, Fernández-Madrid, F., Wooley, P.H. T cell receptor (VB) bias in the response of rheumatoid arthritis synovial fluid T cells to connective tissue antigens. Scand. J. Rheum. 26:166-73, 1997.

Fernández-Madrid, F., Karvonen, R.L., Kraut, M.J., **Czelusniak, B.**, and Ager, J.S. Autoimmunity to Collagen in Human Lung Cancer. Cancer Research 56:121-126, 1996.

Fernández-Madrid, F., **Karvonen, R.L.**, Teitge RA, Reed AM., Miller, P.R. and Negendank, W.G. Synovial thickening detected by MR Imaging in Osteoarthritis of the knee confirmed by biopsy on synovitis Magnetic Resonance Imaging 13:177-183,

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1995.

Wooley, P.H., **Cuesta, I.A.**, Sud, S., Song, Z., **Affholter, J.A.**, **Karvonen, R.L.**, and Fernández-Madrid, F. Synovial fluid cells from rheumatoid arthritis patients express oligoclonal receptor (VB) use in the response to connective tissue antigen. Proc N.Y Acad. Sci. 756:195-198, 1995.

Fernández-Madrid, F., Karvonen, R.L., Teitge, R.A., Reed, A.H., and Negendank, W.G. MR Features of Osteoarthritis of the knee. Magnetic Resonance Imaging, 12: 703-709, 1994.

Karvonen, R.L., Negendank, W.G., Teitge, R.A., Reed, R.A., Miller, P.R. and Fernández-Madrid, F. Factors affecting articular cartilage thickness in osteoarthritis and aging. Journal of Rheumatology 21:1310-1318, 1994.

**Karvonen, R.L.**, Fernández-Madrid, F., Lande, M.A., Hazlett, L.D., Barrett, R.P., An, T., and **Huebner, C.J.** Proteoglycans from osteoarthritic human articular cartilage influence type II collagen in vitro fibrillogenesis. Conn Tissue Res 27:235-250, 1992.

Wooley, P.H., **Siegner, S.W.**, Whalen, J.D., Karvonen, R.L., and Fernández-Madrid, F. Proteoglycan-induced arthritis in BALB/c mice is dependent upon immunization with high density proteoglycans. Ann Rheum Dis 51:983-998, 1992.

**Al-Azem, I.**, Fernández-Madrid, F., Long, P.M., and Wooley, P.H., The immunoregulation of rheumatoid factor by the CD8 T-lymphocyte subset in rheumatoid arthritis. J Rheumatol 19:1337-1341, 1992.

**Levitt, N.G.**, Fernández-Madrid, F., and Wooley, P.H. Pristane-induced arthritis in mice IV: Immunotherapy with monoclonal antibodies directed against lymphocyte subsets. J Rheum 19:1342-1347, 1992.

Fernández-Madrid, F., **Karvonen, R.L.**, and Wooley, P.M., Autoantibodies to proteoglycan in rheumatoid arthritis. Current Rheumatology 13:3-4, 1992.

Negendank, W.G., Fernández-Madrid, F., and Teitge, R. MR imaging of meniscal degeneration in asymptomatic knees. J Orthopedic Res 8(3):311-320, 1990.

Karvonen, R.L., Negendank, W.G., **Frazer, S.M.**, Mayes, M.D., An, T., and Fernández-Madrid, F. Articular cartilage defects of the knee: Correlation between magnetic resonance imaging and gross pathology. Ann Rheum Dis 49:672-675, 1990.

**Karvonen, R.L.**, Fernández-Madrid, F., Maughm, R.C., Palmer, K.C., and Fernández-Madrid, I. Pulmonary radiation fibrosis in mice.. Radiation Research 111:68-80, 1987.

Atdjian, M., and Fernández-Madrid, F. Coexistence of chronic tophaceous gout and rheumatoid arthritis. *J Rheumatol* 12:43-48, 1985.

**Fernández-Madrid, F., Reed, A.H., Karvonen, R.L.,** and Granda, J.L. Influence of antecedent lymphoid surgery on the odds of acquiring rheumatoid arthritis. *J Rheumatol* 12:43-48, 1985.

Fernández-Madrid, F., Noonan, S., Riddle, J. The "spindle shaped" body fibroblasts: Intracellular collagen fibers. *Journal of Anatomy*, 132:157-166, 1981.

**Birk, D.E.,** Lande, M.A. and Fernández-Madrid, F. Collagen and glycosaminoglycan synthesis in aging human keratocyte cultures. *Exp Eye Res* 32:331-339, 1981.

**Birk, D.,** Lande, M.A., and Fernández-Madrid, F. Glyco-saminoglycan synthesis by aging human keratocytes in culture. *Invest Ophthalmol Vis Sci* 19:146, 1980.

Fernández-Madrid, F., Noonan, S., Riddle, J., Karvonen, R., and **Sasaki, D.** Intracellular processing of procollagen induced by the action of colchicine. *Journal of Anatomy*, 130:229-241, 1980.

Prasad, A.S., Fernández-Madrid, F., and Ryan, J.R. Deoxythymidine kinase activity of human implanted sponge connective tissue in zinc deficiency. *Am Journal of Physiol*, 236:272-275, 1979.

Fernández-Madrid, F., Prasad, A.S., and Oberleas, D. Effect of zinc deficiency on nucleic acids, collagen and noncollagenous protein of the connective tissue. *J Lab Clin. Med* 82:951-961, 1973.

Fernández-Madrid, F. Biosynthesis of Collagen: Biochemical and Physicochemical characterization of collagen-synthesizing polyribosomes. *Journal of Cell Biology* 33:27-42, 1967

Fernández Madrid, F. Biosíntesis de colágeno en poliribosomas. *Acta Fisiológica Latinoamericana*, 16 (supl 1): 50, 1966.

Fernández-Madrid, F. Biosynthesis of collagen: Characterization of the collagen polyribosomes. Ph.D. Dissertation, University of Miami, 1966.

Berreta, J.A., Perianes, I., Buzzi, A., and Fernández-Madrid, F. Comunicación aorticopulmonar: un estudio de tres casos operados. *Prensa Médica Argentina* 44:1740-1744, 1957.

Berreta, J.A., Perianes, I., Buzzi, A., and Fernández-Madrid, F. Congenital aortic septal defect: Clinical and surgical considerations of three cases. *Am Heart J* 54:548-555, 1957.

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Review Articles

Fernández-Madrid, F. 1984. Rheumatoid arthritis. In: *Dermatologic Immunology and Allergy*. J. Stone (ed.) St. Louis: C.V. Mosby. pp.425-455.

Fernández-Madrid, F. 1984. Sjögren's syndrome. In: *Dermatologic Immunology and Allergy*. J. Stone (ed.) St. Louis: C.V. Mosby. pp.413-423.

Fernández-Madrid, F., and Mattioli, M. Antinuclear anti-bodies (ANA). Immunological and clinical significance. *Semin Arthritis Rheum*. 1979, 6:83-124.11.

Fernández-Madrid, F. Collagen Biosynthesis. A Review. *Clin. Orthopaedics and Related Research*. 1970, 68:163-181.

Book Chapters

Fernández-Madrid and J. E. Tomkiel. Antinuclear Antibodies as Potential Markers of Lung Cancer. In, *Autoimmunity in Cancer*. Y. Shoenfeld and ME Gershwin, Eds. Elsevier, Amsterdam, 2000 pp 151-158.

Fernández-Madrid, F and J. Granda, Arthritis. In, *Manual of Ortopaedic Surgery*. R Fitzgerald, Ed. Orthopedic Society, 1997.

Fernández-Madrid, F. Copper and zinc compounds in the therapy of rheumatic diseases. In, *Copper and Zinc in Inflammatory Diseases*. Rainsford, K.D., Milanino, R. Sorensen, JRJ and G.P. Velo, Eds. Kluwer Academic Publishers, 1997.

Fernández-Madrid, F. 1989. Copper therapy in inflammatory disorders in man: A special reference to rheumatoid arthritis. In: *Copper and Zinc in Inflammation*. R Milanino, K.D. Rainsford, and G.P. Velo, Eds. Kluwer Academic Publishers. Dordrecht, The Netherlands. pp. 49-67.

**Birk, D.E.**, Lande, M.A., and Fernández-Madrid, F. 1982. Studies on the Production of Corneal Stroma Extracellular Matrix. *Structure of the Eye*. Elsevier North Holland: New York. J.G. Hollyfield, ed., pp.297-309.

Fernández-Madrid, F. 1982. Therapy of rheumatic diseases. In: *Inflammatory Diseases and Copper*. J.R.J. Sorenson (ed.) Clifton, N.J.: Humana Press. pp.435-437.

Prasad, A.S., Fernández-Madrid, F., and Ryan, J.R. 1979. Deoxythmidine kinase activity. Total collagen and protein in sponge connective tissue of sickle cell anemia subjects. In: *Red Cell Metabolism and Function*. G.J. Brewer (ed.) New York: Allan R. Liss 21:515.

Fernández-Madrid, F. 1977. Serotonin, other biologically active principles and the lung. In: *Non-respiratory Functions of the Lung in Anesthesia*. G. Dal Santo (ed.) Int. Anesthesiol Clin. Boston:

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Little Brown. 15:169-188.

Fernández-Madrid, F., Prasad, A.S., and Oberleas, D. 1976. Zinc in collagen metabolism. In: Trace Elements in Health and Human Diseases, A.S. Prasad, (ed.) New York: Academic Press. 1:257-267.

Fernández-Madrid, F., and **Pita, J. Jr.** 1970. Mechanism of action of ascorbic acid in the biosynthesis of collagen. In: Chemistry and Molecular Biology of the Intracellular Matrix, E.A. Balazs (ed.) New York: Proc Symposium Connective Tissue. Santa Margherita, Italy. Academic Press. 1:429-448.

#### Books

**La Mansión de la Quinta Avenida y Otros Cuentos. (Short Stories) Submitted, 2007.**

F. Fernández-Madrid “Cuentos grises y rosados” (Gray and pink short stories) Editorial Último Reino. Colección La Lámpara Errante Buenos Aires, Argentina. 1999

Fernández-Madrid, F. Che´ Guevara and the Incurable Disease. Dorrance Publishers, 1998.

Fernández-Madrid, F. Treating Arthritis: Medicine, Myth and Magic. New York: Plenum Press, 1989.

#### **ABSTRACTS (in the last 7 years)**

**Fernandez Madrid, F. Improved immunoscreening method to identify tumor-associated autoantigens. EDRN Workshop, NIH, Bethesda, March 2004.**

**Fernández Madrid, F., Alansari, H., Tang, N., Karvonen, RL. Method for identifying autoantigens relevant to cancer. Cancer Detection and Prevention. Symposium Volume, February 2004**

**Chu, C.,** Fernandez Madrid, F. Identification of synovial autoantigens by sera from patients with rheumatoid arthritis. American College of Physicians, Michigan Chapter, Annual Meeting, Traverse City, Michigan, September, 2003.

Wiese, W and Fernández Madrid, F. Paraneoplastic polyarthritis and tenosynovitis associated with a benign ovarian teratoma. Abstract and Poster Presentation (Dr Wiese): 26<sup>th</sup> International Congress of Internal Medicine, Kyoto, Japan. Case Report, February 2002.

Fernández-Madrid, F., Karvonen RL, Ensley J, Kraut M, Granda JL, J Tomkiel. Patients with squamous cell carcinoma of the head and neck produce a different spectrum of antinuclear antibodies than patients with lung squamous cell carcinoma. Cancer Detection and Prevention, 24; Supplement, S-236, 2000.

Tomkiel, JE, VandeVord P, Granda JL, Virgin J, Alansari H, and F. Fernández-Madrid. Autoimmunity to nuclear antigens in breast cancer patient sera. International Journal of Molecular Medicine, 6:supplement 1, S-40, 2000.

Fernández-Madrid, F., Granda, J. L., Vandevord, P., **Karvonen, R. L.**, Kraut, M.J., Yang, X., and

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Tomkiel, J.E. Antinuclear antibodies in lung cancer. *Cancer Detection and Prevention*. 22: 185, 1998.

Fernández-Madrid, F., Granda, J.L., Gimotty, P., Vandevord, P., Kraut, M.J., Yang, X., and Tomkiel, J.E. Autoantibodies to subunits of replication protein A (RPA) in sera of patients with malignancies. *Cancer Detection and Prevention* 22: 186, 1998.

Bedrossian, C.W., Karvonen, R.L., Attal, H., Kraut, M.J., and Fernández-Madrid, F. Neuroendocrine markers and Type V collagen content in lung carcinoma: Is there a relationship? *Lung Cancer* 18: 181, 1997.

**Karvonen, R.L.**, Miller, P.R., Nelson, D.A., Granda, J.L., and Fernández-Madrid, F. Periarticular osteoporosis in osteoarthritis of the knee. Podium presentation at the 61<sup>st</sup> Annual Scientific Meeting of the American College of Rheumatology in Washington, D.C., November 12, 1997.

**Karvonen, R.L.**, Kraut, M.J., Bedrossian, C.W., Sreepathi, P., Fawaz, Dawahneh, M., and F. Fernández-Madrid. Type V collagen tissue content distinguishes large cell carcinoma from small cell, squamous and adenocarcinoma of the lung. *Cancer Detection and Prevention*, 2): 524, 1996

**Karvonen, R.L.**, Kraut, M.J., Bedrossian, C.W., Sreepathi, P., Dawahneh, M.F., and Fernández-Madrid, F. Type V collagen tissue content distinguishes large cell lung carcinoma from small cell, squamous, and adenocarcinoma. *Cancer Detection and Prevention* 20: 524-525, 1996.

**Invited and/or refereed international or national meetings (last 7 years)**

**Fernandez Madrid F. Speaker. Rheumatology Update. 6<sup>th</sup> Annual Update in Internal Medicine. Bay Harbor, Michigan July 28-30, 2006.**

**Fernández Madrid F. Speaker on “Potential screening value of a breast cancer autoantigen panel.” Developing New Standards for Autoantibody Measurement Bringing Metrology to Serology, National Institute of Standards and Technology Gaithersburg, MD, February 21-22, 2006**

**Fernández Madrid, F. Speaker and chairman, Session on Manifestations of Cancer. 7<sup>th</sup> International Symposium on the Molecular Basis of Predictive Oncology and Intervention Strategies. Nice, France, February 7-10, 2004.**

**Fernández Madrid, F., Alansari, H., Tang, N., Karvonen, RL. Method for identifying autoantigens relevant to cancer. Oral presentation at the Session on Manifestations of Cancer. 7<sup>th</sup> International Symposium on the molecular basis of Predictive Oncology and Intervention strategies. Nice, France, February 7-10, 2004.**

**Fernández Madrid F. Hematology-Oncology Grand Rounds on Early Diagnosis of breast cancer at the Josephine Ford Cancer Center, HFHS, Detroit, MI. A new Approach, November, 2004.**

Fernández Madrid, F. OHEP Board Review. Systemic Lupus Erythematosus, Scleroderma and Mixed



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Connective Tissue Disease, June, 2003.

Fernández Madrid, F. Invited Seminar on: Musculoskeletal paraneoplastic syndromes. Servicio de Reumatología del Hospital Rivadavia, Buenos Aires, Argentina, November, 2002.

Fernández Madrid, F. Speaker and Chairman, Session on Immunotherapy in Cancer. Conference on "Impact of Biotechnology on Cancer Diagnostic and Prognostic Indicators. Geneva, Switzerland, Oct, 28-31, 2000.

Fernández-Madrid, F., Guest speaker. Cox-1 and Cox-2 inhibitors: Medical Perspectives. University of the Philippines (National Meeting) Medical Alumni Society of America. July 10, 1999. Traverse City, Michigan.

#### **Invited Presentations in last 7 years (State or local)**

**Fernández Madrid, F. Management of inflammatory eye diseases with immunosuppression. The Kresge Eye Institute, Wayne State University, Detroit, MI, March, 2004.**

Fernández Madrid, F. Autoantibodies as biomarkers in the diagnosis of early lung cancer. The Karmanos Cancer Institute, February 27, 2003.

Fernández Madrid, Félix. Autoantibodies in the diagnosis of DCIS of the breast. The Karmanos Cancer Institute. November, 2002.

Fernández Madrid, Félix. Autoantibodies in the diagnosis of breast cancer. The Karmanos Cancer Institute, March, 2002.

Fernandez Madrid, F. The significance of autoantibodies in cancer. The Institute of Gerontology. Wayne State University. April, 2001.

Fernández Madrid, F. Autoimmunity in breast cancer leads to the discovery of potential diagnostic and prognostic markers. The Karmanos Cancer Institute, August 2001

Fernández-Madrid, F. Invited Lecture. Immunomodulation in the Treatment of Uveitis. Kresge Eye Institute, December, 2000.

Fernández Madrid, F. Antinuclear antibodies in lung cancer. Karmanos Cancer Institute, December 2000.

Fernández-Madrid, F. Guest Speaker. Turning point conference. Pain in Rheumatoid Arthritis. Dearborn Inn, Dearborn, MI. Jan 29, 2000.

Fernández-Madrid, F. Guest Speaker. Turning point conference. Treatment of the Rheumatic Diseases. Dearborn Inn, Dearborn, MI. Jan. 29, 2000.

Fernández-Madrid, F., Guest Speaker. Arthritis Forum. Arthritis Foundation. 1) Speaker on new

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medications for arthritis and related diseases. 2) Moderator of medical panel and of lay group panel discussion Sept. 25, 1999.

Fernández-Madrid, F., Guest Speaker. Protein A Immunoabsorption Column for the treatment of Rheumatoid Arthritis. Ritz Carlton Hotel, Dearborn, MI. Oct. 21. 1999.

Fernández-Madrid, F., Guest speaker to Michigan Pharmaceutical Society. Systemic Lupus Erythematosus. Southfield, Michigan, February 21, 2000.

Fernández-Madrid, F. The eye in Rheumatology. Kresge Eye Institute. Detroit, MI, November, 2000

Fernández-Madrid, F. Central Nervous System Manifestation of Systemic Lupus Erythematosus. Lupus Foundation. Public Forum, Hutzel Hospital, June 29, 2000

Fernández-Madrid, F. Rheumatic Paraneoplastic Syndromes. Detroit Medical Center Medical Grand Rounds-Wayne State University Harper Hospital, Detroit, MI January, 2000.

Fernández-Madrid, F. Pathogenesis of cancer associated retinopathy (CAR). Kresge Eye Institute. Detroit, MI, October, 2000.

Fernández-Madrid, F., Seminar on Autoimmunity in Breast Cancer. Karmanos Cancer Institute, Detroit, MI. Nov. 8, 1999.