Updated 02/16/2021

**CURRICULUM VITAE**

**N. LAWRENCE EDWARDS, MD, MACP, MACR**

**Mailing Address:** **Phone**: 352-265-0239

Professor and Vice Chairman **FAX**: 352-265-1107

Program Director **E-Mail**: edwarnl@medicine.ufl.edu

Department of Medicine

1600 SW Archer Road

P.O. Box 100277

Gainesville, FL 32610-0277

**Education**:

1965-1969 University of Notre Dame, South Bend, Indiana – B.S. Degree

1969-1973 University of Miami School of Medicine, Miami, Florida – M.D. Degree

1973-1976 Residency in Medicine, Creighton University Affiliated Hospitals, Omaha, Nebraska

1976-1979 Research Fellow in Rackham Arthritis Research Unit and Clinical Research Center, University of Michigan Medical Center, Ann Arbor, Michigan

**Professional Appointments**:

1979-1980 Instructor, Department of Internal Medicine, Division of Rheumatology, University of Michigan Medical School, Ann Arbor, Michigan

1979-1983 Clinical Associate Physician, Clinical Research Center, University of Michigan Medical Center, Ann Arbor, Michigan

1980-1983 Assistant Professor of Internal Medicine, Division of Rheumatology, University of Michigan Medical School, Ann Arbor, Michigan

1980-1983 Director of Education and Training, University of Michigan, Multidisciplinary Arthritis Center (MAC), Program Director, Division of Rheumatology, Ann Arbor, Michigan

1983-1985 Assistant Professor of Medicine, Division of Clinical Immunology, Department of Medicine, University of Florida, Gainesville, Florida

1985-1995 Associate Professor of Medicine, Division of Clinical Immunology, Department of Medicine, University of Florida, Gainesville, Florida

1988-2002 Program Director, Division of Rheumatology, Department of Medicine, University of Florida, Gainesville, Florida

1988-Present Chief, Rheumatology Section, Veterans Affairs Medical Center, Gainesville, Florida

1990-1991 Visiting Research Scientist, University of Michigan and Howard Hughes Medical Institute for Gene Therapy (sabbatical in laboratory of Gary J. Nabel, M.D.)

1995-Present Professor of Medicine, Division of Clinical Immunology, Department of Medicine, University of Florida, Gainesville, Florida

1997-1999 Interim Chief, Division of Rheumatology and Clinical Immunology, Department of Medicine, University of Florida, Gainesville, Florida

1999-2002 Clinical Chief, Division of Rheumatology and Clinical Immunology, Department of Medicine, University of Florida, Gainesville, Florida

2002-Present Program Director, Medicine Residency Training Program, Department of Medicine, University of Florida, Gainesville, Florida

2003-Present Vice Chairman for Education, Department of Medicine, University of Florida, Gainesville, Florida

**Professional Society Membership**

American Rheumatism Association, 1978

American Federation for Clinical Research, 1978

Central Society for Clinical Research, 1982

Heberden Society, 1983

British Society for Rheumatology, 1983

American College of Rheumatology, Founding Fellow, 1984

American College of Physicians, Fellow, 1987

National Society of Clinical Rheumatologists, 2000

American College of Physicians, Master 2014

Society of Irish and American Rheumatologists, 1987 (Secretary-Treasurer 1995-1999)

Association of Program Directors-Internal Medicine, 2002

**Specialty Certification** (American Board of Internal Medicine)

Internal Medicine, 1977

Rheumatology, 1980

**Medical Licensure**

National Board of Examiners Certification May 1974

Nebraska State Licensure, 1973-1976

Michigan State Licensure, 1976-1986

Florida State Licensure, 1983-Present

**Committees – National/International**

Chronic Disease Advisory Committee to the Governor, Michigan Public Health Department, 1980-1983

Government Affairs Advisory Committee, Michigan Chapter Arthritis Foundation, 1981-1983

Education Committee, American Rheumatism Association, 1983-1988

Professional Education Committee, Arthritis Foundation, 1983-1986

Program Committee, Central Society for Clinical Research, 1984

Executive Planning Committee, NIH Internal Workshop on Osteoarthritis, 1985 (Representative A.R.A. Education Committee)

Chapter Research Grants Subcommittee of the National Research Committee, Arthritis Foundation, 1985-1988. Co-Chairman, 1987-1988.

Program Committee, Biochemistry Subsection, American Rheumatism Association Annual Meeting, 1986

Program Committee, Rheumatology Section, Central Society for Clinical Research, 1986.

Course Director, Univ. of Florida Update in Rheumatology, Amelia Island, FL. April, 1990

Ad Hoc Member, Medical Biochemistry Study Section, NIH. 1990-1991, 1992-1993

Education Materials Committee, American College of Rheumatology, 1991-1994

Chairman, Education Materials Committee, American College of Rheumatology, 1995-1997

Education Council, American College of Rheumatology, 1995-1997

Nominations and Appointments Committee, American College of Rheumatology, 1997-1999

Executive Council, American College of Physicians – Florida Chapter, 2003-present

REF Grants Review Committee, American College of Rheumatology, 2003, Study Section Chair 2004-2007

OMERACT 7, Co-Chair of Special Interest Group on Gout, 2004 – Carmel, California

FDA/Orphan Development Grant (Metabolic Diseases) Review Panel 2005-2006

Chairman and CEO, The Gout and Uric Acid Education Society 2005-present

OMERACT 8, Co-Chair, Special Interest Group on Gout, 2006 – Barcelona, Spain

OMERACT 9, Co-Chair, Gout Module, 2008 – Calgary, Alberta, Canada

Chairman, ACR Abstract Selection Committee, Miscellaneous Rheumatic Diseases Section, 2009-2011

OMERACT 10, Co-Chair, Gout Module, 2010, Malaysia

OMERACT 11, Co-Chair, Gout Module, 2012, Pinehurst, NC

Co-Chair for Metabolic and Crystal Arthropathies Category, American College of Rheumatology Abstract Selection Committee, 2013-2016

Member, Annual Program Planning Committee, American College of Rheumatology, 2013-2016.

OMERACT 12, Co-Chair, Gout Section, 2014, Budapest, Hungary

United Rheumatology, Medical Practice Board, 2014-present.

**Committees – Hospital/Medical Center**

Veterans Administration Animal Care Committee, Gainesville VAMC, 1985-1994

Drug Utilization and Education Subcommittee (Pharmacy and Therapeutics Committee) Shands Hospital, University of Florida Medical Center, 1987-1992

General Clinical Research Center (GCRC) Advisory Committee, University of Florida Medical Center, 1988-2011

GCRC Mock Site Visit, Intramural Reviewer, University of Florida Medical Center, 1990, 1995, 2000, 2005

Pharmacy and Therapeutics Committee, Veterans Administration Medical Center, Gainesville, Florida 1989-1994

Executive Committee, Medical Service, Veterans Affairs Medical Center, Gainesville, 1988-present

Chairman, Clinical Research Center (GCRC) Advisory Committee, University of Florida, 1994-2011

Chairman, Pharmacy and Therapeutics (P&T) Committee, North Florida/South Georgia Veterans Affairs Health System, 2002-present

Internal Committee for Graduate Medical Education, College of Medicine, University of Florida, 2002-present

Chairman, Faculty Evaluation Committee, Department of Medicine, University of Florida, 2002-present

Executive Advisory Group, Department of Medicine, University of Florida, 2003-2011

Chairman, Scientific Advisory Committee (SAC), CTSI, University of Florida, 2010-present

**Honors and Awards**

Rheumatology Research Fellowship, NIH Training Grant, 1976-1978

Clinical Associate Physician Award, USPHS, 1978-1980

Clinical Investigator Award, NIADDK, 1980-1983

Veterans Administration Clinical Investigator Award, 1985-1988

Anglo-U.S. Travel Fellowship – Co-Sponsored by the Arthritis and Rheumatism Council of Great Britain and the American Rheumatism Association, October-November 1983

National Society for Clinical Rheumatologists, elected member, 2000

American College of Physicians, Florida Chapter, Teacher of the Year Award, 2003

Creighton University, The James S. Sullivan Visiting Professorship Award, 2007

University of Florida College of Medicine, Exemplar Teacher Award, 2008

The 59th Pemberton Award, the Philadelphia Rheumatism Society, 2009

Master, American College of Physicians, 2014

Master, American College of Rheumatology, 2015

Alpha Omega Alpha (AOA) Honor Society, Faculty Member, 2017

**Invited Lectureships**

Invited Lectureship, Sponsored by Burroughs-Wellcome, Madrid, Spain, November 16-18, 1983

Rheumatology Mini-course, American College of Physicians, National Meeting, New York, 1988

Invited Lectureship, The Second Swiss Seminar in Advanced Rheumatology, Bad Ragaz, 1988

Arthritis Branch Grand Rounds, NIH, 1989

Rheumatology Clinical Seminar, Georgetown University, 1989

Arthritis Grand Rounds, Women and Brigham Hospital, Boston MA, 1990

Medical Grand Rounds, Creighton University, Omaha NE, 1991

Medical Grand Rounds, Northwestern University, Chicago IL, 1992

Florida Rheumatology Society, Key Biscayne FL, 1992

Medical Grand Rounds, Creighton University, Omaha NE, 1995

Southern Medical Association, Annual Meeting Symposium on Osteoarthritis, Key Biscayne FL, 1997

Medical Grand Rounds, Mercer University, Savannah GA, 1998

Lloyd Nolan Foundation, Update in Internal Medicine, Greenbrier WV, 1998

Southern Medical Association, Focus on the Elderly, Branson MO, 1998

American College of Physicians, MKSAP XI Review Course, Rheumatology and Allergy/Immunology, Orlando FL, 1999

American College of Physicians, MKSAP XII Review Course, Rheumatology and Allergy/Immunology, Orlando FL, 2000

Southern Medical Association, Focus on Pain, Orlando FL 2001

Florida Pharmacy Association, Pain Management in Osteoarthritis, Marco Island FL, 2001

American College of Physicians, MKSAP XII Review Course, Rheumatology and Allergy/Immunology, Orlando FL, 2001

Lloyd Nolan Foundation, Update in Internal Medicine, Hilton Head SC, 2001

American College of Physicians, MKSAP XII Review Course, Rheumatology and Allergy/Immunology, Orlando FL, 2002

American College of Rheumatology, Annual Scientific Meeting, Symposium on Hyperuricemia and Gout, San Antonio TX, 2004

Utah Rheumatology Association, Annual Meeting, Optimal Treatment of Hyperuricemia and Gout, 2005

American College of Rheumatology, Annual Scientific Meeting, Symposium on Hyperuricemia and Gout, San Diego CA, 2005

University of Michigan, Medical Grand Rounds, April 2006

Harvard University (MGH) Rheumatology Grand Rounds, Boston, MA, 2007

American College of Rheumatology, Annual Scientific Meeting, Curbside Consult Symposium, Boston MA, 2007

South Carolina Rheumatology Society, Annual Meeting, Charleston SC, 2008

EULAR, Symposium on Co-morbidities of Hyperuricemia, Paris, 2008

University of Michigan, Annual Rheumatology Update, Captiva Island FL, 2008

American College of Rheumatology, Annual Meeting, Symposium on Gout Management, San Francisco CA, 2008

Association of Hospital-Based Pharmacists, Annual Meeting, Orlando FL, 2008

Association of Program Directors – Internal Medicine (APDIM), Introductory Course for New Program Directors, Dallas TX, 2009

University of Michigan, Annual Rheumatology Update, Mackinaw Island MI, 2009

Temple University, Medical Grand Rounds, 2009

Georgia Rheumatism Society Annual Meeting, Invited Lecturer, Atlanta, 2010

American College of Rheumatology Winter Rheumatology Symposium, Speaker, Snowmass, 2010

American Geriatric Association Annual Meeting, Chicago. Invited Lecturer, Chicago, 2010

New Zealand Rheumatism Society Annual Meeting Invited Lecturer, Auckland, NZ, 2011

St. Louis Rheumatology Society Annual Invited Lecturer, 2011

Washington University, Medical Grand Rounds St. Louis, MO 2011

RAIN Visiting Professor, University of Nebraska, Omaha, 2011

Geisinger Clinic Visiting Professor, Danville, PA, 2012

Dow Graduate Association of North America (DOGANA), Orlando, 2012

New York State Rheumatology Society, Annual Meeting Lecturer, New York City, 2012

Upstate New York Rheumatism Society, Buffalo, NY, 2012

Council of State Rheumatology Organizations (CSRO), Annual Meeting, San Francisco, 2013.

6th Annual Perspectives in Rheumatic Diseases, Las Vegas, NV, 2013

EULAR Annual Scientific Meeting, Paris, France, June, 2014

Chair, GUAES Roundtable discussion of Non-Rheumatologists approach to gout, AANP Annual Meeting, Nashville, TN, June, 2014

Florida Society of Rheumatologists Annual Meeting, Orlando, FL, July, 2014

Kansas Society of Rheumatology Annual Meeting, Wichita, Oct 2014

New York State Rheumatology Society, Annual Meeting, New York City, 2015

European Crystal Network, Paris, 2016

RAIN Visiting Professor**,** University of Nebraska, 2016

National Kidney Foundation (NKF) workshop on Gout and Kidney Disease. Atlanta, 2016

American College of Rheumatology Annual Meeting, Review Course. Washington DC, 2016

American College of Rheumatology Annual Meeting, Meet the Professor, Washington, 2016

American College of Rheumatology Winter Rheumatology Symposium, Invited Speaker, Snowmass, CO 2017

American College of Physicians Annual Meeting, Symposium on Gout, New Orleans, 2018

Connecticut Rheumatology Association, Update on Gout, New Haven, 2018

Wisconsin Rheumatology Society, Sheboygan, 2019

Congress of Clinical Rheumatologists, Destin, FL, 2019

International Symposium on Hyperuricemia and Gout, Boston, 2019

Grand Rounds, University of Pittsburgh, 2019

American College of Rheumatology Annual Meeting, Symposium on Gout, Atlanta, 2019

Congress of Clinical Rheumatologists, San Diego, 2019

The 2nd International Nephrocardiology Conference, Orlando, 2020

The 2020 Rheumatology Conference, Huntsville Alabama, 2020

**Advisory/Editorial Boards**

Editorial Board, British Journal of Rheumatology, 1988-1994

Editorial Board, Rheumatology Reviews, 1990-1996

Reviewer, Arthritis and Rheumatism

Reviewer, Rheumatology

Reviewer, Annuals of Rheumatic Diseases

Reviewer, New England Journal of Medicine

Reviewer, Journal of American Medical Association

Reviewer, Nature and Nature-Medicine

**Journal Articles**

1. Weissberg SM, **Edwards NL**, O’Leary LA: Prophylactic Antibodies in Cesarean Section. Obstet Gynec 38:290-293, 1972.
2. **Edwards NL**, Gelfand EW, Biggar D, Fox IH: Partial Deficiency of Purine Nucleoside Phosphorylase: Studies of Purine and Pyrimidine Metabolism. J Lab Clin Med 90:736-749, 1978.
3. **Edwards NL**, Magilavy DB, Cassidy JT, Fox IH: Lymphocyte Ecto-5’-Nucleotidase Deficiency in Agammaglobulinemia Science 201: 628-630, 1978.
4. **Edwards NL**, Recker DP, Fox IH: Impaired Purine Salvage: A Mechanism of Overproduction in Hypoxanthine-Guanine Phosphoribosyltransferase (HGPRT) Deficiency. J Clin Invest 63: 922-930, 1979.
5. Wortmann R, Mitchell B, **Edwards NL**, Fox IH: Biochemical Basis for Differential Deoxyadenosine Toxicity to T- and B-Lymphoblasts. Proc Natl Acad Sci 76: 2434-2437, 1979.
6. **Edwards NL**, Gelfand EW, Burk L, Dosch HM, Fox IH: Distribution of 5’ Nucleotidase in Human Lymphoid Tissue. Proc Natl Acad Sci, USA 76: 3474-3476, 1979.
7. **Edwards NL**, Fox IH: Technical comment: 5’-nucleotidase activity in lymphocytes from patients with x-linked Agammaglobulinemia. Science 205:520-521, 1979.
8. Recker DP, **Edwards NL**, Fox IH: Histochemical evaluation of lymphocytes in hypogammaglobulinemia: Decreased number of 5’-nucleotidase positive cells. J Lab Clin Med 95:175-179, 1980.
9. Fox IH, Kaminska J, **Edwards NL**, Gelfand E, Rich KC, Arnold WN: Altered purine and pyrimidine metabolism in erythrocytes with purine nucleoside phosphorylase deficiency. Biochem Genet 18:221-234, 1980.
10. **Edwards NL**, Cassidy JT, Fox IH: Lymphocyte 5’-nucleotidase deficiency in hypogammaglobulinemia: Clinical characteristics. Clin Immunology Immuno Path 17:76-88, 1980.
11. **Edwards NL**, Cassidy JT, Fox IH: Lymphocyte 5’-nucleotidase deficiency: Clinical and metabolic characteristics of the associated hypogammaglobulinemia. Adv Exper Medicine Biol 122B:315-320, 1980.
12. **Edwards NL,** Recker DP, Fox IH: Hypoxanthine salvage in man: Its importance in urate overproduction in the Lesch-Nyhan syndrome. Adv Exper Med Biol 122A:301-306, 1980.
13. Wortmann RL, Mitchell BS, **Edwards NL**, Fox IH: Possible role for 5’-nucleotidasae in deoxyadenosine selective toxicity in cultured human lymphoblasts. Adv Exper Med Biol 122B:243-250, 1980.
14. Rich KC, Sampson H, **Edwards NL**, Fox IH: Hypogammaglobulinemia with variable serum immunoglobulins: Concordance with 5’-nucleotidase deficiency in a family. Am J Disease Child 135:795-798, 1981.
15. Bertorini J, Palmieri T, Airozo D, Rawley S, **Edwards NL**, Fox IH: Disordered purine nucleotide degradation in Duchenne Muscular Dystrophy. Pediatr Res 15:1478-1482, 1981.
16. **Edwards NL**, Recker DP, Airozo D, Fox IH: Enhanced purine salvage during allopurinol therapy: An important pharmacologic property in humans. J Lab Clin Med 98:673-683, 1981.
17. **Edwards NL**, Recker DP, Manfredi J, Rembecki R, Fox IH: Regulation of purine metabolism by plasma membrane and cytoplasmic 5’-nucleotidase. Metabolic role of plasma membrane and cytoplasmic 5’-nucleotidase. Amer J Physiol 243:C270-C277, 1982.
18. Mitchell BS, **Edwards NL**, Koller CA: Deoxyribonucleoside triphosphate accumulation by leukemic cells. Blood 62:419-424, 1983.
19. **Edwards NL**: The diagnosis and management of gouty arthritis. Comprehensive Ther 9:14-19, 1983.
20. Shope JT, Figley BA, Jette AM, Kulik CL, **Edwards NL**: Functional status outcome after treatment of rheumatoid arthritis. Clin Rheum Pract 1:243-248, 1983.
21. Mitchell BS, **Edwards NL**: Purine metabolizing enzymes as predictors of lymphoblast sensitivity to deoxyadenosine. J Lab Clin Med 104:414-424, 1984.
22. **Edwards NL**, Mitchell BS, Fox IH, Mond JJ: Plasma membrane 5’-nucleotidasae and other purine enzymes in murine lymphocytes. Adv Exper Biol, 165B:131-134, 1984.
23. **Edwards NL**, Fox IH: Enzyme replacement in the Lesch-Nyhan syndrome with long-term erythrocyte transfusions. Adv Exper Med Biol, 165:87-92, 1984.
24. Silverstein FS, Johnston MV, Hutchinson RJ, **Edwards NL**: Lesch-Nyhan syndrome: CSF neurotransmitter abnormalities. Neurology 35:907-911, 1985.
25. Sidi Y, **Edwards NL**, Bunn P, Mitchell BS: Differential metabolism of Deoxyribonucleoside by leukaemic T cells of mature and immature origin. British J Haemat 61:125-134, 1985.
26. **Edwards NL**: Immunodeficiencies associated with errors in purine metabolism. Med Clin North Am. 69:505-518, 1985.
27. Wotring LL, **Edwards NL**, Crabtree GW, Parks RE, Townsend LB: Mechanism of activation of TCN-P as a pro drug form of TCN. Cancer Treat Reports 70:491-497, 1986.
28. Panush RS, Schmidt C, Caldwell J, **Edwards NL**, Longley S, Yonker R: Is running associated with degenerative joint disease? J Amer Med Assoc 255:1152-1154, 1986.
29. **Edwards NL**, Silverstein FS, Johnston MV: Purine and monoamine metabolites in cerebrospinal fluid. Adv Exper Med Biol 195B:53-56, 1986.
30. **Edwards NL**, Puig JG, Mateos FA: The effect of allopurinol on cerebrospinal fluid (CSF) purines on hypoxanthine-guanine phosphoribosyltransferase deficiency syndromes. Adv Exper Med Biol 195A:465-469, 1986.
31. **Edwards NL**, Zaytoun AM, Renard GA: Separate mechanisms for cellular uptake of purine nucleotides by B- and T-lymphoblasts. Adv Med Biol 195B:463-466, 1986.
32. Endo LP, **Edwards NL**, Longley S, Corman LC, Panush RS: Silicone and rheumatoid diseases. Seminars Arth Rheum 27:112-118, 1987.
33. Brown DG, Greer JM, Webster EM, Yonker RA, **Edwards NL**, Longley S, Panush RS: Central nervous system vasculitis. An Allergy 58:162-163, 209-212, 1987.
34. Yonker RA, Webster EM, **Edwards NL**, Katz P, Longley S, Panush RS: Technetium pyrophosphate muscle scans in inflammatory muscle disease. Brit J Rheum 26:267-269, 1987.
35. Greer JM, Longley S, **Edwards NL**, Elfenbein GF, Panush R: Vasculitis associated with malignancy: Experience with 13 patients and literature review. Medicine 67:220-230, 1988.
36. Panush RS, **Edwards NL**, Longley S, Webster EM: Rhupus syndrome. Arch Inter Med 148:1633-1636, 1988.
37. **Edwards NL**, New concepts in molecular biology: Implications for clinical rheumatology. Postgraduate Advances in Rheumatology, Forum Medicum, Vol 3(No. 9), 1-14, 1989.
38. **Edwards NL**, Johnston MV, Silverstein FS, Mark R: Cerebrospinal fluid cyclic nucleotide alterations in the Lesch-Nyhan syndrome. Adv Exper Med Biol 253A:181-184, 1989.
39. Panush RS, Delafuente JC, Connelly CS, **Edwards NL**, Greer JM, Longley S, Bennett F: Profile of a meeting: how abstracts are written and reviewed. J. Rheumatol 16:145-147, 1989.
40. **Edwards NL**, Mond JJ: Metabolism of guanosine and its C-8 substituted analogues in human lymphocyte cytoplasm. Adv Exper Med BIol 253B:286-289, 1989.
41. Brown DG, **Edwards NL**, Greer JM, Longley S, Abbott F, Gillespy T, Panush RS: Magnetic resonance imaging in patients with inflammatory arthritis of the knee. Clin Rheumatology 9, 73-83, 1990.
42. Yancey WB, **Edwards NL**, Williams RC: Cryoglobulins in a patient with SLE, livido reticularis, and elevated level of anticardiolipin antibodies. Am J Med 88, 699, 1990.
43. **Edwards NL**: Drugs to lower uric acid levels: how to avoid misuse in gouty arthritis. Postgraduate Medicine 89, 111-116, 1991.
44. **Edwards NL**, Campbell D: Multicentric reticulohistiocytosis: Systemic macrophage disorder. Bailliere’s Clinical Rheumatology 5:301-319, 1991.
45. Perkins ND, **Edwards NL**, Duckett CS, Schmid RM, Nabel GJ: Protein interactions between specific NF-кB subunits and Sp1: Regulation of inducible HIV gene expression and the role of p49/100 NF-кB cell. EMBO J., 12:3551-3558, 1993.
46. Popp JD, Bidgood WD, **Edwards NL**. The gouty tophus. Rheumatology Rev., 2:163-168, 1993.
47. Popp JD, **Edwards NL**: New Insights into gouty arthritis. Contemp Int. Med, 7:55-62, 1995.
48. Howe S, **Edwards NL**: Management of hyperuricemia and gout in heart transplant patients. J. Musculoskel Med 12:15-24, 1995.
49. Fiske DN, **Edwards, NL:** Clinical manifestations and pathogenesis of osteoarthritis. Contemp Int Med 7(No. 6):13-31, 1995.
50. Fiske DN, Bush CH, **Edwards NL**: Axial skeletal changes of paralysis may mimic Ankylosing Spondylitis. Brit J Rheumat 34:174-177, February 1995.
51. Popp JD, Bidgood WD, **Edwards NL**: Magnetic Resonance Imaging of seven patients with tophaceous gout of the hands and wrists. Seminars Arth Rheum 25:282-289, 1996.
52. Gutierrez M, **Edwards NL**: Techniques of joint aspiration and steroid injections. J. Musculoskel Med 13:41-48, 1996.
53. Hahn P, **Edwards NL**: Diagnosis and pharmacologic approach for osteoarthritis. Primary Care 8: 23-31, 1999.
54. Zeb S, **Edwards NL:** Non-pharmacologic treatment of osteoarthritis. Primary Care 8:32-39, 1999.
55. **Edwards NL**, McTigue J: Steroid injection and aspiration help minimize pain. Biomechanics 6(9): 73-77, 1999.
56. Siragusa R, Ramos-Caro FA, **Edwards NL**, Flowers FP: Drug-induced lupus due to phenytoin. J. Pharm Technol 15: 1-3, 1999.
57. Barnes EV, **Edwards NL**: Treatment of Osteoarthritis. Southern Med J. 98:205-209, 2005.
58. **Edwards NL**: Case 6: Maintenance Therapy for Simple Intermittent Gout. Am J Med 119(11): S20-S22, 2006.
59. **Edwards NL**: Case 7: Differential Diagnosis of Advanced Gout. Am J Med 119(11): S23-S24, 2006.
60. **Edwards NL**: Case 9: Initiation of Urate-Lowering Therapy for Advanced Gout Complicated by Chronic Renal Insufficiency. Am J Med 119(11): S29-S31, 2006.
61. Schumacher HR, **Edwards NL**, Perez-Ruiz F, Becker M, Chen LX, Furst DE, Joseph-Ridge N, Schlesinger N, Horowitz Z, Saag K, Boice JA, Yamanaka H: Outcome measures for acute and chronic gout. J Rheumatol 32:2452-2455, 2007.
62. Schumacher HR, Taylor W, Joseph-Ridge N, Perez-Ruiz F, Chen LX, Schlesinger N, Khanna D, Furst DE, Becker MA, Dalbeth N, **Edwards NL**: Outcome evaluations in gout. J Rheumatol 34:1381-1385, 2007.
63. Kawata AK, Benjamni KL, Waltrip RW, Huang B, Maroli AN, Sundy JS, Becker MA, Schumacher HR, **Edwards NL**, Frank L: Validation of the SF-36 and HAq-di IN Patients with Severe Gout. Ann Rheum Disease 66: 236-242, 2007.
64. **Edwards NL**: The role of hyperuricemia and gout in kidney and cardiovascular disease. Cleve Cl J Med 75(5): S13-S16, 2008.
65. Kirby BS, McTigue JC, **Edwards NL**: Pain Management in Gout. Current Pain and Headache Reports 12: 418-422, 2008.
66. **Edwards NL**: The role of hyperuricemia in vascular disorders. Curr Opin Rheumatol 21: 132-137, 2009.
67. Taylor WJ, Shewchuk R, Saag KG, Schumacher HR, Singh JA, Grainger R, **Edwards NL**, Bardin T, Waltrip RW, Simon LS, Burgos-Vargas R. Towards a valid definition of gout flare – results of consensus exercises using Delphi methodology and cognitive mapping. Arth Care Research 61: 535-543, 2009.
68. Becker MA, Schumacher HR, Benjamin KL, Gorevic P, Greenwald M, Fessel J, **Edwards NL**, Kawata AK, Frank L, Waltrip R, Maroli A, Huang B. The Gout Natural History Study Group, Sundy JS. Quality of Life and Disability in Patients with Treatment-Failure Gout. J Rheumatol 36:5; 1041-1048, 2009.
69. **Edwards NL**: Febuxostat: A new treatment for hypereuricaemia in gout. Rheumatology 48; 15-18, 2009.
70. Schumacher HR, Taylor W, **Edwards NL**, Grainger R, Schlesinger N, Dalbeth N, Silvera F, Singh J, Evan R, Perez-Ruiz F. Outcome domains for studies of acute and chronic gout. J Rheumatol 36: 2342-2345, 2009.
71. Schumacher HR, Becker MA, **Edwards NL**, Palmer WE, MacDonald PA, Palo W, Joseph-Ridge N: Magnetic resonance imaging in the quantitative assessment of gouty tophi. Int J Clin Pract 60:408-414, 2006.
72. Gaffo AL, **Edwards NL**, Saag KG: Hyperuricemia and cardiovascular disease: how strong is the evidence for a causal link? Arthritis Res Therapy 11:(240)1-7, 2009.
73. Grainger R, Taylor WJ, Dalbeth, N, Perez-Ruiz F, Singh JA, Waltrip RW, Schlesinger N, Evans R, **Edwards NL,** Sivera F, Diaz-Torne C, MacDonald PA, McQueen F, Schumacher HR: Outcomes domains for studies of acute and chronic gout. J Rheumatol: 36(10):2346-2355, 2009.
74. Schumacher HR, Taylor W, **Edwards NL**, Grainger R, Schclesinger N, Dalbeth N, Sivera F, Singh J, Evans R, Waltrip RW, Diaz-Torne C, MacDonald P, McQueen F, Perez-Ruiz F: Progress in measurement instruments for acute and chronic gout studies. J Rheumatol: 36(10):2342-2345, 2009.
75. Mandell BF, **Edwards NL**, Sundy JS, Simkin PA, Pile JC: Preventing and treating acute gout attacks across the clinical spectrum: A roundtable discussion. Clev Clin J Med 77(Suppl 2) S2-S25; 2010.
76. Doghramji PP, McTigue J, **Edwards NL**. Managing Gout in the primary care setting: What you and your patients need to know. Amer J Med; 123: 52-58, 2010.
77. Brook RA, Forsythe A, Ottery FD, Smeeding JE, **Edwards NL**: Epidemiology and disease burden of chronic gout in patients refractory to conventional therapy. Curr Med Research Opinion 26: 2813-2821, 2010.
78. Brook RA, Forsythe A, Smeeding JE, **Edwards NL**: Chronic gout: epidemiology, disease progression, treatment and disease burden. Curr Med Res Opin; 26:2813-2821, 2010.
79. **Edwards NL**, Sundy JS, Simkin PA, Pile JC: Preventing and treating acute gout attacks across the clinical spectrum: A roundtable discussion. Cleve Clin J Med; 77(suppl 2): S2-S25, 2010.
80. Dalbeth N, McQueen FM, Singh J, MacDonald P, **Edwards NL**, Schumacher HR, Simon L, Stamp L, Neogi T, Gaffo A, Khanna P, Becker M, Dabbous O, Taylor WJ: Tophi measurement as an outcome measure for clinical trials for chronic gout: progress and research priorities. J Rheumatol; 38(7): 1458-1461, 2011.
81. Stamp LK, Khanna P, Dalbeth N, Taylor WJ, Schumacher HR, **Edwards NL**: Serum urate as a biomarker in chronic gout – will it be the first validated soluble biomarker? J. Rheumatol; 38(7):1462-1466, 2011.
82. **Edwards NL**: Quality of Care in patients with gout: Why is management suboptimal and what can be done about it? Curr Rheumatol Rep; 13:154-159, 2011.
83. **Edwards NL**, Sundy JS, Forsythe A, Blume S, Pan F, Becker MA: Work productivity loss due to flares in patients with chronic gout refractory to conventional therapy. J Med Econom; 14:10-15, 2011.
84. Stamp LK, Zhu X, Dalbeth N, Jordan S, **Edwards NL**, Taylor W: Serum Urate as a Soluble Biomarker in Chronic Gout – Evidence that Serum Urate Fulfills the OMERACT Validation Criteria for Soluble Biomarkers. Semin Arthritis Rheum; 40:483-500, 2011.
85. Singh JA, Taylor WJ, Simon LS, Khanna PP, Stamp LK, McQueen FM, Neogi T, Gaffo AL, Becker MA, MacDonald PA, Dabbous O, Strand V, Dalbeth ND, Aletaha D, **Edwards NL**, Schumacher HR: Patient-Reported Outcomes in Chronic Gout: A Report from OMERACT 10. J Rheumatol; 38(7):1452-1457, 2011.
86. Dalbeth N, McQueen FM, Singh JA, MacDonald PA, **Edwards NL**, Schumacher HR, Simon LS, Stamp LK, Neogi T, Gaffo AL, Khanna PP, Becker MA, Taylor WJ: Tophus Measurement as an Outcome Measure for Clinical Trials of Chronic Gout: Progress and Research Priorities. J Rheumatol; 38(7):1458-1461, 2011.
87. Stamp LK, Khanna PP, Dalbeth N, Boers M, Maksymowych WP, Schumacher HR, Becker MA, MacDonald PA, **Edwards NL**, Singh JA, Simon LS, McQueen FM, Neogi T, Gaffo AL, Strand V, Taylor WJ: Serum Urate in Chronic Gout – Will it be the First Validated Soluble Biomarker in Rheumatology? J Rheumatol; 38(7):1462-1466, 2011.
88. Taylor WJ, Singh JA, Saag KG, Dalbeth N, MacDonald PA, **Edwards NL**, Simon LS, Stamp LK, Neogi T, Gaffo AL, Khanna PP, Becker MA, Schumacher HR: Bringing it all together: A novel approach to the development of response criteria for chronic gout clinical trials. J Rheumatol; 38(7): 1467-1470, 2011.
89. Sundy JS, Baraf HSB, Yood RA, **Edwards NL**, Gutierrez-Urena SR, Treadwell EL, Vazquez-Mellado J, White WB, Lipsky PE, Horowitz Z, Huang W, Maroli AN, Waltrip RW, Hamburger SA, Becker MA: Efficacy and tolerability of pegloticase for the treatment of chronic gout in patients refractory to conventional treatment. JAMA; 306(7):711-720, 2011.
90. Hamburger M, Baraf HSB, Adamson TC, Basile J, Bass L, Cole B, Doghramji PP, Guadagnoli GA, Hamburger F, Harford R, Lieberman JA, Mandel DR, Mandelbrot DA, McClain BP, Mizuno E, Morton AH, Mount DB, Pope RS, Rosenthal KG, Setoodeh K, Skoseyt J, **Edwards** **NL**. 2011 Recommendations for the Diagnosis and Management of Gout and Hyperuricemia. Postgrad Med 123; (Vol 6, Suppl 1): 3-34, 2011.
91. Grainger R, Dalbeth N, Keen H, Duncan L, **Edwards NL**, Perez-Ruiz F, Diaz-Torne C, Khanna D, Simon L, Taylor WJ. Imaging as an outcome measurement in gout. J Rheumatol 42: 2460-2464, 2011
92. Hunt JM, McTigue JC, **Edwards NL**: Diagnosis and Management of Gout in 2011. J Musculoskel Med; 28(10): 2011.
93. Strand V, Khanna D, Singh J, Forsythe A, **Edwards NL**: Improved health-related quality of life and physical function in patients with refractory chronic gout following treatment with pegloticase: Evidence from Phase 3 randomized controlled trials. J Rheumatol; 39(7): 1450-1457, 2012.
94. Khanna D, FitzGerald JD, Khanna PP, Bae, S, Singh M, Neogi T, Pillinger MH, Merill J, Lee S, Prakash S, Kaldas M, Gogia M, Perez-Ruiz F, Taylor W, Liote F, Choi H, Singh JA, Dalbeth N, Kaplan S, Niyyar V, Jones D, Yarows SA, Roessler B, Kerr G, King C, Levy G, Furst DE, Ogawa R, **Edwards NL**, Mandell B, Schumacher HR, Robbins M, Wenger N, Terkeltaub; 2012 American College of Rheumatology Guidelines for Management of Gout. Part I: Systematic non-pharmacologic and pharmacologic therapeutic approaches to hyperuricemia. Arthritis Care & Research, Vol. 64, 1431-1446, 2012.
95. Khanna D, Khanna PP, FitzGerald JD, Singh MK, Bae, S, Neogi T, Pillinger MH, Merill J, Lee S, Prakash S, Kaldas M, Gogia M, Perez-Ruiz F, Taylor W, Liote F, Choi H, Singh JA, Dalbeth N, Kaplan S, Niyyar V, Jones D, Yarows SA, Roessler B, Kerr G, King C, Levy G, Furst DE, Ogawa R, **Edwards NL**, Mandell B, Schumacher HR, Robbins M, Wenger N, Terkeltaub R; 2012 American College of Rheumatology Guidelines for Management of Gout. Part II: Therapy and anti-inflammatory prophylaxis of acute gouty arthritis. Arthritis Care & Research, Vol. 64, 1447-1461, 2012.
96. Prowse RL, Dalbeth N, Kavanaugh A, Adebajo AO, Gaffo AL, Terkeltaub R, Mandell BF, Suryana BPP, Goldenstein-Schainberg C, Diaz-Torne C, Khanna D, Liote F, McCarthy G, Kerr GS, Yamanaka H, Janssens H, Baraf HF, Chen J-H, Vazquez-Mellado J, Harrold LR, Stamp L, van de Laar MA, Janssen M, DohertyM, Boers M, **Edwards NL**, Gow P, Chapman P, Khanna P, Helliwell, Grainger R, Schumacher HR, Neogi T, Jansen TL, Louthrenoo W, Sivera F, Taylor WJ. A Delphi exercise to identify characteristic features of gout - opinions from patients and physicians, the first stage in developing new classification criteria. J Rheumatol, Feb 15, 2013; doi: 10.3899/jrheum.121037.
97. **Edwards NL**, So A. Emerging therapies for gout. Rheum Dis Clin. 40 (2), 375-387, 2014
98. Singh JA, Taylor WJ, Dalbeth N, Simon LS, Sundy J, Grainger R, Alten R, March L, Strand V, Wells G, Khanna D, McQueen F, Schlesinger N, Boonen A, Boers M, Saag KG, Schumacher HR, **Edwards NL**. OMERACT endorsement of measures of outcome for studies of acute gout. J Rheumatol 41:569-73, 2014
99. Taylor WJ, Redden D, Dalbeth N, Schumacher HR, **Edwards NL**, Simon LS, John MR, Essex MN, Watson DJ, Evans R, Rome K, Singh JA. Application of the OMERACT filter to measures of core outcome domains in recent clinical studies of acute gout. J Rheumatol 41:574-80, 2014
100. Singh JA, Bharat A, **Edwards NL**. An internet survey of common treatments used by patients with gout including cherry extract and juice and other dietary supplements. J Clin Rheumatol. 2015 Jun;21(4):225-6. doi: 10.1097/RHU.0000000000000246.
101. **Edwards NL**, Doghramji PP, Harding MM, McTigue JC, Roberts JR, Romansky N. Finding consistency in the diagnosis and management of gout: the Gout Society Roundtable. J Clin Rheum (in press, 2015).
102. Neogi T, Jansen T, Dalbeth N, Fransen J, Schumacher HR, Berendsen D, Brown M, Choi H, **Edwards NL,** Janssens H, Liote F, Naden R, Nuki G, Ogdie A, Perez-Ruiz F, Saag K, Singh JA, Sundy J, Tausche AK, Vazquez-Mellado J, Yarows S, Taylor WJ. 2015 Gout Classification Criteria: An American College of Rheumatology-European League Against Rheumatism Collaborative Initiative. Arthritis Rheumatol. 2015 Oct;67(10):2557-68. doi: 10.1002/art.39254.
103. Singh J, Nipam S, **Edwards NL**. A cross-sectional, internet-based patient survey of the management strategies of gout. BMC Complement Altern Med. 2016 Mar 1;16:90. doi: 10.1186/s12906-016-1067-3.
104. **Edwards NL,** Malouf R, Perez-Ruiz F, Richette P, Southam S, DiChiara M. A computational lexical analysis of the language used to describe gout. Arthritis Care Res. 2016 Jun;68(6):763-8. doi: 10.1002/acr.22746.
105. Ruoff GW and **Edwards NL.** Overview of serum uric acid treatment targets in gout: why less than 6 mg/dL? Postgrad Med. 2016 Sep;128(7):706-15. doi: 10.1080/00325481.2016.1221732.
106. Neogi T, Dalbeth N, Stamp L, Castelar G, Fitzgerald J, Gaffo A, Singh J, Mikuls TR, Vazquez-Mellado J, **Edwards NL.** Renal Dosing of allopurinol results in suboptimal gout care. Ann Rheum Dis. 2017 Jan;76(1):e1. doi: 10.1136/annrheumdis-2016-210352.
107. Singh JA, **Edwards NL**. EULAR gout treatment guidelines: uric acid and neurocognition. Ann Rheum Dis. 2018 Apr;77(4):e20. doi: 10.1136/annrheumdis-2017-211418.
108. **Edwards NL**, Singh J, Troum O, Yeo A, Lipsky PE. Characteristics of patients with chronic refractory gout who do and do not have clinically apparent tophi and their response to pegloticase. Rheumatology (Oxford) 2019 Mar 6;kez017. doi:10.1093/rheumatology/kez017.
109. Brenton-Rule A, Dalbeth N, **Edwards NL,** Rome K. Experience of finding footwear and factors contributing to footwear choice in people with gout: a mixed methods study using a web-based survey. JJ Foot Ankle Res. 2019 Jan 8:112:3. doi:10.1186/s13047-018-0313.y.
110. Schlesinger N, **Edwards NL**, Khanna P, Yeo A, Lipsky PE. Evaluation of Proposed Criteria for Remission and Evidence-Based Development of Criteria for Complete Response in Patients with Chronic Refractory Gout. ACR Open Rheumatol. 2019 May 23;1(4):236-243. doi: 10.1002/acr2.1025. eCollection 2019 Jun. ACR Open Rheum Vol 1, No 4 2019, pp 236-243. doi:10.1002/acr2.1025.
111. Bursill D, Taylor WJ, Terkeltaub R, Abhishek A, So AK, Vargas-Santos AB, Gaffo A, Rosenthal AK, Taushe AK, Reginato AM, Manger B, Scirè CA, Pineda C, van Durme C, Lin CT, Yin C, Albert DA, Biernat-Kaluza E, Roddy E, Pascual E, Becce F, Perez-Ruiz F, Sivera F, Lioté F, Schett G, Nuki G, Filippou G, McCarthy GM, Da Rocha Castelar-Pinheiro G, Ea HK, De Almeida Tupinambá H, Yamanaka H, Choi H, Mackay JM, O’Dell JR, Vázquez-Mellado J, Singh JA, Fitzgerald JD, Jacobsson LTH, Joosten LAB, Harrold LR, Stamp LK, Andrés M, Gutierrez M, Kuwabara M, Dehlin M, Janssen M, Doherty M, Hershfield MS, Pillinger MH, **Edwards NL**, Schlesinger N, Kumar N, Slot O, Ottaviani S, Richette P, MacMullan P, Chapman P, Lipsky PE, Robinson PC, Khanna PP, Gancheva RN, Grainger R, Johnson RJ, Te Kape R, Keenan RT, Tedeschi SK, Kim SC, Choi S, Fields TR, Bardin T, Uhlig T, Jansen TL, Merriman TR, Pascart T, Neogi T, Klück V, Louthrenoo W, Dalbeth N. Gout, Hyperuricemia and Crystal-Associated Disease Network (G-CAN) consensus statement regarding labels and definitions of disease states of gout. Ann Rheum Dis. 2019 Nov;78(11):1592-1600. doi: 10.1136/annrheumdis-2019-215933.
112. **Edwards NL**, Schlesinger N, Clark S, Arndt T, Lipsky P. Management of Gout in the United States: A Claims-Based Analysis. ACR Open Rheumatol. 2020 Mar;2(3):180-187. doi: 10.1002/acr2.11121.
113. Schlesinger N, **Edwards NL**, Yeo A, Lipsky P. Development of a multivariable improvement measure for gout. Arthritis Res Ther. 2020 Jun 29;22(1):164. doi: 10.1186/s13075-020-02254-4.
114. Singh JA and **Edwards NL**. Patient perception of gout management goals: a cross-sectional internet survey. J Clin Rheumatol. 2020 June;26(4):129-133. doi: 10, 1097/rhu.00000000000981. PMID 30614892.
115. Singh JA, **Edwards NL**. Gout Management and outcomes during the COVID-19 pandemic: A cross-sectional internet survey. Ther Adv Musculokel Dis. 12:1-8, 2020.
116. Schlesinger N, **Edwards NL**, Clark S, Lipsky P. Rheumatologist Care is Associated with Fewer Emergency Room Visits by Persons with Gout. Arth Res Care. 2020 (In-press).
117. Mandell BF, Fields TR, **Edwards NL**, Yeo AE, Lipsky PE. Post-hoc analysis of pegloticase pivotal trials in chronic refractory gout: Relationship between fluctuations in plasma urate levels and acute flares. Clin Exper Rheumatol. Jan 2020;38:000-000. PMID: 33427618
118. Botson JK, Keenan R, Albert J, Masri KR, Peterson J, Yung C, Freyne B, Amin M, Abdellatif A, Soloman N, **Edwards NL**, Lipsky PE, Baraf HSB, Strand V. Expert opinion on pegloticase with concomitant immune modulatory therapy in the treatment of uncontrolled gout to improve durability of response. J. Clin Rheumatol.

**Books and Chapters**

1. **Edwards NL**, Fox IH: Disorders Associated with Purine and Pyrimidine Metabolism. *In* Special Topics in Endocrinology and Metabolism (eds M.P. Cohen and P.P. Foa) 6:96-140, Alan R. Liss, Inc. (New York) 1984.
2. **Edwards NL**: Molecular Advances in Rheumatology. The Second Swiss Seminar in Advanced Rheumatology (ed. F. Hansler) 2:11-27, 1989 Ciba-Geigy Press (Basel).
3. Corman LC, Bell CL, **Edwards NL,** Harman CE: Rheumatology for the House Officer, Williams and Wilkins (Baltimore), 1990.
4. Agudelo C, Bomalaski JS, **Edwards NL,** Goldman JA, Ike RW, Klassen LW, Mahowald ML, Messner RP, Rahn DW, Weinstein A, Ytterberg S: American College of Rheumatology – Core Curriculum in Clinical Rheumatology, 1993.
5. Howe S, **Edwards NL**: Management of hyperuricemia and gout. *In* Conn’s Current Therapy, (ed RE Rakel) W.B. Saunders Company, Philadelphia, 502-505, 1995.
6. **Edwards NL**: Gout: Clinical and laboratory features. *In* Primer on the Rheumatic Disease Edition 11 (ed JH Klippel) Arth Found Press 234-239, 1997.
7. **Edwards NL**: Practical Problems in Crystal-Related Arthropathies. Rheumatology 2nd Edition (ed. JH Klippel and PA Dieppe) Chap. 19. Mosby (London), 1998.
8. **Edwards NL**: Autoimmune Diseases. *In* Principles of Molecular Medicine (ed JL Jameson) 299-308, Humana Press (New Jersey), 1998.
9. **Edwards NL**: Management of Hyperuricemia. *In* Arthritis and Allied Conditions 14th Edition (ed WJ Koopman) Williams and Wilkins (Baltimore), 2000.
10. **Edwards NL**: Gout: Clinical and Laboratory Features. *In* Primer on the Rheumatic Diseases Edition 12 (ed JH Klippel) Arthritis Found Press, 313-319, 2001.
11. Boulware DW, Becker MA, **Edwards NL**: Gout and Crystal-Induced Synovitis, *In* Clinical Primer of Rheumatology (ed WJ Koopman, DW Boulware, GR Heudebert) Lippincott Williams and Wilkins (Philadelphia), 2003.
12. Hahn P, **Edwards NL**: Management of Hyperuricemia. *In* Arthritis and Allied Conditions, 15th Edition (ed WJ Koopman) Williams and Wilkins (Baltimore), 2004.
13. **Edwards NL**: Gout: Clinical and Laboratory Features. *In* Primer on the Rheumatic Diseases Edition 13 (ed JH Klippel) Arthritis Found Press, 371-375, 2005.
14. **Edwards NL**: Management of Hyperuricemia. *In* Arthritis and Allied Conditions 16th Edition (ed WJ Koopman) Williams and Wilkins (Baltimore), 2009.
15. **Edwards NL**: Gout: Clinical and Laboratory Features. *In* Primer on the Rheumatic Diseases Edition 14 (ed JH Klippel) Arthritis Found Press, 2009.
16. **Edwards NL,** Gibson T, Terkeltaub RA: Chapter 36. Gout treatment. *In* Clinician’s Pearls and Myths (ed. John Stone), Springer Scientific, Boston, 2009.
17. **Edwards NL**: Chapter 281, Crystal Deposition Diseases. Cecil’s Textbook of Medicine. 24th Edition, 2010.
18. Terkeltaub RA, **Edwards NL**: Gout: Diagnosis and management of gouty arthritis and hyperuricemia. Professional Communications, Inc. New York. 2010.
19. **Edwards NL**: Clinical Gout Chapter 181, *in* Rheumatology, 5th Edition (ed. Hockberg MC, Stram A, Smolen JS, Weinblatt M, Weisman M), 2010.
20. Arthritis Foundation 2010 Drug Guide. Supplement to Arthritis Today.
21. Schumacher HR, **Edwards NL**, Chen L, Mandell BF, Curtis P. Guidelines for managing hyperuricemia and gout. International Guidelines Center. 2011. [www.MyGuidelinesCenter.com](http://www.MyGuidelinesCenter.com).
22. Terkeltaub RA, **Edwards NL**: Gout: Diagnosis and Management of gout, arthritis and hyperuricemia. Edition 2. Professional Communications Inc., New York, 2011.
23. **Edwards NL**. Crystal-Induced Joint Disease. ACP Medicine (ed. Nabel EG and Federman DD). Decker Publications Inc, 2013.
24. **Edwards NL**. Crystalline Arthropathies in inPractice Rheumatology (ed David Borenstein), Clinical Options Press, 2013.
25. Terkeltaub RA, **Edwards NL**. Gout: Diagnosis and Management of Gouty Arthritis and Hyperuricemia. Edition 3. Professional Communication Inc, New York,2013.
26. **Edwards NL**. Clinical gout. Chapter 89. Rheumatology, 6th Edition (ed MC Hockberg), 2014
27. **Edwards NL**. Chapter 273. Crystal Deposition Disease in Cecil’s Textbook of Medicine 24th Edition, 2015.
28. **Edwards NL.** Crystal-Induced Arthropathies in Baliga RR (ed). Textbook of Internal Medicine with 1000 MCQs for the Boards, Blendon Miller, 2017
29. Terkeltaub RA and **Edwards NL.** Gout: Diagnosis and Management of Gouty Arthritis and Hyperuricemia. Edition 4. Professional Communications Inc, New York, 2016.
30. **Edwards, NL.** Clinical Manifestations and Quality of Life Impact of Gout. *in* Gout (ed Schlesinger N and Lipsky P) Elsevier Publ, 2018
31. **Edwards NL**. Chapter 257. Crystal Deposition Disease in Cecil’s Textbook of Medicine 25th Edition, 2019.

**Abstracts**

1. **Edwards NL**, Gelfand EW, Biggar D, Fox IH: Alteration of purine catabolism in purine nucleoside phosphorylase deficiency. Clin Res 25:323A, April 1977.
2. **Edwards NL**, Recker DP, Fox IH: Hypoxanthine-guanine phosphoribosyltransferase (HGPRT) deficiency: Altered purine catabolism. Clin Res 25:615A, October 1977.
3. **Edwards NL,** Gelfand EW, Biggar D, Fox IH: Disordered production and catabolism of purines in purine nucleoside phosphorylase (PNP) deficiency. Clin Res 25:581A, October 1977.
4. **Edwards NL,** Fox IH: Resistance to nucleoside induced metabolic inhibition in purine nucleoside phosphorylase (PNP) deficiency. Central Rheumatism Society, Winter Meeting, January 1978.
5. **Edwards NL,** Recker DP, Fox IH: Hypoxanthine-guanine phosphoribosyltransferase (HGPRT) deficiency: The role of impaired purine salvage in urate overproduction. Clin Res 26:375A, 1978.
6. **Edwards NL**, Magilavy DB, Cassidy JT, Fox IH: Lymphocyte ecto-5’-nucleotidase deficiency in congenital Agammaglobulinemia. Clin Res 26:513A, 1978.
7. **Edwards NL**, Magilavy DB, Cassidy JT, Fox IH: Lymphocyte plasma membrane 5’-nucleotidase: A partial deficiency in Agammaglobulinemia. Arthritis Rheumatol 21:5,554, 1978.
8. **Edwards NL**, Cassidy JT, Fox IH: Lymphocyte ecto-5’-nucleotidase deficiency: Characteristics of an immune deficient subgroup. Clin Res 26:713A, 1978.
9. **Edwards NL**, Burk L, Gelfand EW, Dosch HM, Fox IH: Variation of 5’-nucleotidase activity in human mononuclear cells. Clin Res 27:324A, 1979.
10. **Edwards NL**, Cassidy JT, Fox IH: Lymphocyte 5’-nucleotidase deficiency: Clinical characteristics of the associated hypogammaglobulinemia. Clin Res 27:324A, 1979.
11. Wortmann RL, Mitchell BS, **Edwards NL**, Fox IH: Biochemical basis for differential toxicity to T- and B-lymphoblasts: A rule for 5’-nucleotidase. Arthritis Rheumatol 22:6,676, 1979.
12. **Edwards NL**, Recker D, Fox IH: Overproduction of uric acid in hypoxanthine-guanine phosphoribosyltransferase: Contribution by impaired purine salvage. J Clin Chem Clin Biochem 17:404-405, 1979.
13. **Edwards NL,** Cassidy JT, Fox IH: Lymphocyte 5’-nucleotidasae deficiency: Clinical characteristics of the associated hypogammaglobulinemia. J Clin Chem Clin Biochem 17:404, 1979.
14. **Edwards NL,** Jeryc W, Leiberman C, Fox IH: Enzyme replacement therapy in the Lesch-Nyhan syndrome. Clin Res 28:139A, 1980.
15. **Edwards NL**, Mond JJ, Mitchell BS, Fox IH: Deoxynucleotide triphosphate accumulation and purine enzyme activity in murine lymphocytes: Support for a model of selective lymphocyte toxicity. Clin Res 28:140A, 1980.
16. Recker DP, **Edwards NL**, Fox IH: Histochemical evaluation of 5’-nucleotidase in congenital agammaglobulinemia (CAG). Clin Res 28:143A, 1980.
17. Mitchell BS, Fox IH, **Edwards NL**: Deoxyadenosine triphosphate accumulation by leukemic cells in vitro. Clin Res 27:639A, 1979.
18. **Edwards NL,** Jeryc W, Leiberman C, Fox IH: Enzyme replacement therapy in the Lesch-Nyhan syndrome. Clin Res 27:626A, 1979.
19. Burk LL, **Edwards NL**, Gelfand EW, Dosch HM, Fox IH: 5’-nucleotidase: A marker for T-lymphocyte populations. Clin Res 27:715A, 1979.
20. **Edwards NL**, Mond JJ, Mitchell BS, Fox IH: Relationship of 5’-nucleotidase activity and dATP accumulation in murine lymphocytes: Support for a model of selective lymphocyte toxicity. Clin Res 28:344A, 1980.
21. **Edwards NL**, Recker DP, Manfredi J, Fox IH: Role of cytoplasmic and plasma membrane 5’-nucleotidase in regulating intracellular nucleotide levels. Arthritis Rheumatol 23:668, 1980.
22. **Edwards NL**, Jeryc W, Leiberman C, Fox IH: Erythrocyte transfusion therapy in the Lesch-Nyhan syndrome: The effect of enzyme replacement. Arthritis Rheumatol 23:667, 1980.
23. **Edwards NL**, Recker D, Barich J, Airozo D, Fox IH: Decreased p urine excretion during allopurinol therapy: Contribution by enhanced hypoxanthine salvage. Clin Res 28:785A, 1980.
24. Bertorini TE, Palmieri GMA, Airozo D, **Edwards NL**, Fox IH: Duchenne muscular dystrophy: Evidence for increased adenine nucleotide degradation. Clin Res 28: 786A, 1980.
25. Mitchell BS, **Edwards NL**, Koller CA: Susceptibility of leukemic cells to deoxynucleotide chemotherapy: An *in vitro* test. Clin Res 29:439A, 1981.
26. **Edwards NL**, Airozo D, Recker D, Barich J, Fox IH: Enhancement of the purine salvage pathway by allopurinol: Demonstration of a new pharmacologic effect. Clin Res 29:484, 1981.
27. Bertorini TE, Palmieri GMA, Airozo D, **Edwards NL**, Fox IH: Increased adenine nucleotide turnover in Duchenne muscular dystrophy. Clin Res 29:400A, 1981.
28. Recker DP, **Edwards NL**, Fox IH: Cytoplasmic 5’-nucleotidase in human lymphoid cells. Clin Res 29:801A, 1981.
29. Gunter-Hunt G, Shope JT, **Edwards NL**: The outcome of social work initiated referrals in an adult arthritis clinic. Arthritis Rheumatol 25:S85, 1982.
30. Shope JT, Figley BA, Jette AM, Kulik CL, Horn JR, Springgate RR, **Edwards NL**: Rheumatoid arthritis patient outcome after arthritis center inpatient treatment. Arthritis Rheumatol 25:S12, 1982.
31. **Edwards NL**, Fox IH: Enzyme replacement in the Lesch-Nyhan syndrome with long-term erythrocyte transfusions. J Clin Chem Clin Biochem 20:365, 1982.
32. **Edwards NL**, Mitchell BS, Fox IH, Mond JJ: Plasma membrane 5’-nucleotidase dATP accumulation in murine lymphocytes. J Clin Chem Clin Biochem 20:365, 1982.
33. Mitchell BS, **Edwards NL**, Koller CA: Purine enzyme markers in human leukemic cells: Correlation with deoxyribonucleoside triphosphate accumulation *in vitro* and *in vivo*. J Clin Chem Clin Biochem 20:397, 1982.
34. **Edwards NL**, Woodward JA: Toxicity of 6-mercaptopurine riboside monophosphate (6-MPRP) in human T- and B-lymphoblasts. Clin Res 30:735A, 1982.
35. Mitchell BS, **Edwards NL**: Deoxyribonucleoside catabolism by human T- and B-lymphoblast cell lines. Clin Res 30:776A, 1982.
36. Sidi Y, **Edwards NL**, Bunn P, Mitchell BS: Differential toxicity of deoxyribonucleosides for acute and chronic leukemia cells of T-cell origin. Proc Am Assoc Cancer Res 24:300, 1983.
37. Wong JA, **Edwards NL**: The roles of 5’-nucleotidase and non-specific phosphatase in cell surface catabolism of purine nucleotides. Clin Res 31:455A, 1983.
38. Silverstein FS, **Edwards NL**, Johnston MV: Changes in cerebrospinal fluid (CSF) neurotransmitter and purine metabolites in children with Lesch-Nyhan syndrome. Ann Neurol 14:378-379, 1983.
39. **Edwards NL**, Puig JG: The effect of allopurinol on cerebral spinal fluid oxypurines in the Lesch-Nyhan syndrome; Arthritis Rheumatol 27:4(suppl): S33, 1984.
40. Yonker R, Webster E, **Edwards NL**, Katz P, Longley S, Panush RS: Pyrophosphate muscle scans in inflammatory disease. Arthritis Rheumatol 27:4 (suppl): S45, 1984.
41. **Edwards NL**, Zaytoun AM, Renard GA: Separate mechanisms for cellular uptake of purine nucleotides by B- and T-lymphoblasts. Clin Res 33:375A, 1985.
42. **Edwards NL**, Silverstein FS, Johnston MV: Purine and monoamine metabolites in cerebrospinal fluid. Pediatr Res 19:753, 1985.
43. **Edwards NL**, Puig JG, Mateos FA: The effect of allopurinol on cerebrospinal fluid (CSF) purines in hypoxanthine-guanine phosphoribosyltransferase deficiency syndromes. Pediatr Res 19:173, 1985.
44. Webster E, **Edwards NL**, Longley S, Panush RS: Rhupus 1984. Clin Res 33: 795A, 1985.
45. Yonker R, Webster E, **Edwards NL**, Longley S, Panush RS: Central nervous system vasculitis. Arthritis Rheumatol 28:S98, 1985 (suppl).
46. **Edwards NL**, Zaytoun AM, Renard GA: Separate mechanisms for cellular uptake of purine nucleotides by B- and T-lymphoblasts. Pediatr Res 19:753, 1985.
47. Endo L, **Edwards NL**, Longley S, Panush RS: Breast augmentation and arthritis. Musculoskeletal symptoms after silicone mammoplasty. Arthritis Rheumatol 29(suppl): S34, 1986.
48. **Edwards NL**: Evidence for wide subcellular distribution of 5’-nucleotidase activity in human lymphoblasts. Clin Res 34: 493A, 1986.
49. **Edwards NL**: Differential metabolism of the C-8 substituted guanine rib nucleosides. Clin Res 35:454A, 1987.
50. Brown DG, **Edwards NL**, Greer JM, Longley S, Abbott F, Gillespy T, Panush RS: Magnetic resonance imaging in patients with inflammatory arthritis of the knee. Arthritis Rheumatol 30(suppl): S92, 1987.
51. Longley S, Quisling RG, Syper GW, Ballinger WE, Brown DG, Greer JM, **Edwards NL**, Panush, RS: Neurological lesions in rheumatoid arthritis. A new perspective. Arthritis Rheumatol 30(suppl): S92, 1987.
52. Greer JM, Longley S, **Edwards NL**, Panush RS: Vasculitis associated with malignancy: Experience with 13 patients. Arthritis Rheumatol 31(suppl): R38, 1988.
53. Greer JM, Longley S, **Edwards NL**, Panush RS: Incomplete lupus. Arthritis Rheum 31(suppl: R41, 1988.
54. Connelly CS, **Edwards NL**, Longley S, Panush RS: Should NSAIDs be stopped prior to elective surgery for arthritis patients? Arthritis Rheumatol 31(suppl): R40, 1988.
55. Brenner GF, Panush RS, Longley S, **Edwards NL**, Greer JM, Melamed BG: Psychosocial adjustment to rheumatoid arthritis. Arthritis Rheumatol 31(suppl): R46, 1988.
56. **Edwards NL**, Mond JJ: Metabolism of guanosine and its C-8 substituted analogues in human lymphocyte cytoplasm. Pediatr Res, 24:116, 1988.
57. **Edwards NL**, Johnston MV, Silverstein FS: Cerebrospinal fluid cyclic nucleotide alterations in the Lesch-Nyhan syndrome. Pediatr Res 24:115, 1988.
58. Popp JD, **Edwards NL**: Assessment of six patients with tophaceous gout of the hands by magnetic resonance imaging. Arthritis Rheumatol 35(suppl): S75; 1992.
59. **Edwards NL**, Broom C: Selective lymphocytotoxicity to purine nucleotides is mediated by the translocase activity of CD-73. Arthritis Rheumatol 35(suppl): S242; 1992.
60. **Edwards NL**, Nabel GJ: Cooperatively between NF-κB and Sp1 binding in the HIV-1 long terminal repeat (LTR). Arthritis Rheumatol 36(suppl): S113, 1993.
61. Fiske D, Popp JD, Bidgood WD, **Edwards NL**: Serial assessment of gouty tophus resolution: Comparing the relative usefulness of clinical, radiographic and magnetic resonance imaging (MRI) measurements. Arthritis Rheumatol 37(suppl): S32; 1994.
62. Fiske D, **Edwards NL**: Paralysis-associated spondyloarthropathy may mimic ankylosing spondylitis. Arthritis Rheumatol 38 (suppl); R22, 1995.
63. **Edwards NL**, Popp JD, Fiske DN: Soft tissue and bony improvement following aggressive hyperuricemia treatment of gout. J Invest Med 43(suppl2): 363A, 1995.
64. McTigue J, Ktaili M, **Edwards NL**: Factors affecting long-term efficacy of intra-articular corticosteroid injection. Arthritis Rheumatol 41(suppl3): 138A, 1998.
65. Baraf HS, Becker MA, **Edwards NL**, Gutierrez-Urena SR, Sundy JS, Treadwell EL, Vazquez-Mellado J, Yood RA, Horowitz Z, Huang B, Maroli A, Waltrip R: Tophus response to pegloticase (PGL) therapy: Pooled results from GOUT1 and GOUT2, PGL phase 3 randomized, double blind, placebo-controlled trials. Rheumatol 58:9(suppl); S176, 2008.
66. Strand V, Singh JA, Sundy J, Schumacher HR, Becker M, **Edwards NL**: Health-related quality-of-life (HRQOL) of patients with refractory gout (Refractory-Gout) and US Veterans Administration patients with gout and comorbidities (VA-Gout) is poor and comparable to that in other severe chronic conditions. Arthritis Rheumatol 58:9(suppl); S177, 2008.
67. **Edwards NL**, Baraf HS, Becker MA, Gutierrez-Urena SR, Sundy JS, Treadwell EL, Vazquez-Mellado J, Yood RA, Kawata AK, Benjamin KL, Horowitz Z, Huang B, Maroli A, Waltrip R: Improvement in health-related quality of life (HRQL) and disability index in treatment failure gout (TFG) after pegloticase (PGL) therapy: Pooled results from GOUT1 and GOUT2, phase 3, randomized, double blind, placebo (PBO)-controlled trials. Arthritis Rheumatol 58:9(suppl); S178, 2008.
68. Sundy JS, Baraf HS, Becker MA, **Edwards NL**, Gutierrez-Urena SR, Treadwell EL, Vazquez-Mellado J, Yood RA, Horowitz Z, Huang B, Maroli A, Waltrip R: Efficacy and Safety of intravenous (IV) pegloticase (PGL) in subjects with treatment failure gout (TFG): phase 3 results from GOUT1 and GOUT2. Arthritis Rheumatol 58:9(suppl); S400, 2008.
69. **Edwards NL**, Blume S, Pan F, Becker MA, Schumacher HR, Waltrip R, Forsythe A, Sundy JS: Work productivity loss due to flares in treatment-failure gout (TFG). Arthritis Rheumatol 58:9(suppl); S880, 2008.
70. Becker MA, Treadwell EL, Baraf HS, **Edwards NL**, Gutierrez-Urena SR, Sundy JS, Vazquez-Mellado J, Yood RA, Horowitz Z, Huang W, Maroli AN, Waltrip RW, Wright D: Immunoreactivity and clinical response to pegloticase (PGL) pooled data from GOUT1 and GOUT2, PGL phase 3 randomized, double blind, placebo-controlled trials. Arthritis Rheumatol 58:9(suppl); S880, 2008.
71. Sundy JS, Baraf HSB, Becker MA, **Edwards NL**, Gutierrez-Urena SR, Treadwell EL, Vazquez-Mellado J, Yood RA, Horowitz Z, Huang B, Maroli A, Waltrip RW: Efficacy and safety of intravenous (IV pegloticase (PGL) in treatment failure gout (TFG): results from GOUT1, GOUT2, and GOUT3. EULAR Abstract Supplement, Ann Rheum Disease 2009. [in press]
72. Yood RA, Baraf HSB, Becker MA, **Edwards NL**, Gutierrez-Urena SR, Sundy JS, Treadwell EL, Vazquez-Mellado J, Horowitz Z, Huang W, Maroli AN, Waltrip RW: Clinical manifestations of treatment failure gout (TFG) in four independent cohorts. EULAR Abstract Supplement, Ann Rheum Disease 2009. [in press]
73. **Edwards NL**, Baraf HS, Becker MA, Gutierrez-Urena SR, Sundy JS, Treadwell EL, Vazquez-Mellado J, Yood RA, Strand V, Kawata AK, Horowitz Z, Huang B, Maroli A, Waltrip R: Health-related quality of life (HRQOL) and disability index: Results from GOUT1 and GOUT2. EULAR Abstract Supplement, Ann Rheum Disease 2009. [in press]
74. Baraf HSB, Becker MA, **Edwards NL**, Gutierrez-Urena SR, Sundy JS, Treadwell EL, Vazquez-Mellado J, Yood RA, Horowitz Z, Huang W, Maroli AN, Waltrip RW: Reduction of tophus size with pegloticase (PGL) in treatment failure gout (TFG): Results from GOUT1 and GOUT2. EULAR Abstract Supplement, Ann Rheum 2009. [in press]
75. Strand V, **Edwards NL,** Sundy JS, Becker MA, Singh JA: Health-related quality-of-life (HRQOL) of patients with treatment failure gout (TFG) is poor, and comparable to that in other severe chronic conditions. EULAR Abstract Supplement, Ann Rheum Disease 2009. [in press]
76. Sundy JS, Schumacher HR, Becker MA, **Edwards NL**, Hatoum H, Pickard S, Waltrip RW. Quality of life in patients with treatment failure gout. Presented at EULAR Annual Scientific Meeting, Rome, Italy. 2011
77. **Edwards NL**, Baraf HS, Becker MA, Sundy JS, Treadwell EL, Vazquez-Mellado J, Yood RA, Kawata AK, Benjamin KL, Herowitz ZX, Huang B, Maroli A, Waltrip R: Improvement in health-related quality of life (HRQL) and disability index in treatment failure gout (TFG) after pegloticase (PGL) therapy. Presented at American College of Rheumatology Annual Scientific Meeting. Philadelphia, PA. 2011
78. Khanna D, Forsythe A, Khanna PP, Maranian P, Strand V, **Edwards NL**: Long term improvement and maintenance of health-related quality of life (HRQOL) and disability in chronic gout patients refractory to conventional therapy treated with pegloticase -results from open label extension studies. Presented at EULAR Annual Scientific meeting in Rome, Italy. 2011
79. **Edwards NL**, Forsythe A, Smith K, Goren A: Pegloticase Phase III trials demonstrate improvement in HRQOL and SF-6D utility. Presented at Annual Scientific Meeting of American College of Rheumatology, Chicago, 2011.
80. Brook RA, Forsythe A, Smeeding JE, **Edwards NL**: Chronic gout: epidemiology, disease progression, treatment and disease burden. Curr Med Res Opin; 26(12): 2012.
81. Sundy JS, Baraf HSB, Yood RA, **Edwards NL**, Gutierrez-Urena SR, Treadwell EL, Vazquez-Mellado J, White WB, Lipsky PE, Horowitz Z, Huang W, Maroli AN, Waltrip RW, Hamburger SA, Becker MA: Efficacy and tolerability of pegloticase for the treatment of chronic gout in patients. 2013
82. Singh JA, Bharat A, **Edwards NL**. An internet survey of common treatments used by patients with gout. Presented at EULAR Annual Scientific Meeting. Paris, 2014.
83. Singh JA, Shah N, **Edwards NL**, Schumacher HR.: Treatment of gout with pharmacological and non-pharmacological complementary therapy in the U.S.: an internet survey. Presented at ACR Annual meeting, San Francisco, 2015.
84. **Edwards NL**, Singh J, Troum O, Yeo A, Lipsky PE. Characterization of patients with chronic refractory gout who do and do not have clinically apparent tophi: response to pegloticase. Presented at EULAR 2017 in Madrid, Spain.
85. Johnson R, **Edwards NL**, Pillinger M, Yeo T, Lipsky P. Association of renal dysfunction and development of tophi in subjects with chronic refractory gout. Presented at ASN Annual Meeting, 2018.
86. Schlesinger N, **Edwards NL,** Johnson R, Yeo A, Lipsky P. Relationship between renal function and development of remission in patients with chronic refractory gout treated with pegloticase. Presented at Annual ACR meeting, Chicago, 2018.
87. **Edwards NL,** Schlesinger N, Clark S, Arndt T, Lipsky PE. Management of gout in the United States: a claims-based analysis. Presented at Annual ACR meeting in Atlanta, 2019.