

Anthony Alan Nuara, M.D., Ph.D., F.A.A.D.

CCT Research
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CONTACT INFORMATION:

Site Selection and Information:

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AFFILIATIONS:

Center for Dermatology and Plastic Surgery/ CCT Research
14301 N. 87th St, Suite 302,
Scottsdale, AZ 85260

EDUCATION:

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| 2006-2008 | Fellow of the American Academy of Dermatology
St. Louis School of Medicine, St. Louis, Missouri |
| 2002-2006 | Doctorate in Philosophy, Major: Molecular Microbiology and Immunology
St. Louis University, St. Louis, MO |
| 2000-2002 | Doctorate in Medicine
St. Louis University, St. Louis, Missouri |
| 1998-1999 | B.A. Chemistry – Magna Cum Laude
University of Arizona, Tucson, AZ |
| 1995-1998 | B.S. Biochemistry and Molecular & Cellular Biology- Magna Cum Laude
University of Arizona, Tucson, AZ |

INTERSHIPS AND RESIDENCIES:

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| 2009-2012 | Residency, Dermatology
University of Texas Southwestern Medical Branch |
| 2008-2009 | Internship
St John's Mercy Medical Center, St Louis, MO |

LICENSURE:

License # 44556, State of Arizona

CERTIFICATION:

Board Certified Dermatology, State of Arizona

PROFESSIONAL EXPERIENCE:

Principal Investigator, 2018 – present
CCT Research, Scottsdale, AZ

Phoenix Medical Director and Principal Investigator, 2018 – present
Stephens and Associates Research, Phoenix, AZ

Physician, 2016 – present
Arizona Arthritis and Rheumatology Research PLL, Phoenix, AZ
Phoenix Children’s Hospital, Phoenix, AZ

Physician, 2016 – present
Physician Research Group, LLC

Physician, 2014 – present
Center for Dermatology and Plastic Surgery

Physician, 2012 – 2014
Skin and Cancer Center of Arizona
State Farm Insurance, Tempe, AZ

INVESTIGATOR EXPERIENCE:

Acne • Alopecia Areata • Bullous Pemphigoid • Dermatitis • Lichen Planopilaris
Pemphigoid Gestationis • Plaque Psoriasis • Urticaria • Vitiligo

INVESTIGATOR INTEREST:

Device • Laser • Liposuction • Melanoma

INVESTIGATOR EXPERIENCE:

Acne

CLEARup Efficacy of XXX for the treatment of Acne

INVESTIGATOR EXPERIENCE (*continued*):

Dermatitis

A Phase III, A Multinational, Randomized, Double-blind, Parallel-group, Placebo-controlled Study to Investigate the use of XXX as a Treatment Option for Patients with Moderate to Severe Bullous Pemphigoid (BP)

A Phase III, Prospective, Multicenter, Long-Term Study to Assess the Safety and Efficacy of XXX in Subjects With Moderate-to-Severe Atopic Dermatitis

A Phase IIa, Multicenter, Randomized, Double-blind, Vehicle-controlled, Parallel-group Study to Determine the Safety, Tolerability, Pharmacokinetics, and Efficacy of XXX in Adult Patients with Moderate or Severe Atopic Dermatitis

A Phase II, Randomized, Double-Blind, Placebo-Controlled Study to Assess Immunization Responses in Subjects with Moderate-to-Severe Atopic Dermatitis Treated with XXX

A Phase II, Randomized, Double-Blind, Vehicle-Controlled Study of the Efficacy, Safety, and Tolerability of XXX Topical Spray for the Treatment of Pruritus in Adults with a History of Atopic Dermatitis

A Phase IIa, Multicentre, Randomized, Double-blind, Placebo-controlled, Study to Evaluate the Safety, Tolerability and Efficacy of Treatment with XXX in Adult Patients With Moderate to Severe Atopic Dermatitis

An Open label Extension Study to Assess the Long Term Safety of Treatment with XXX Administered Subcutaneously in Adult Patients with Moderate to Severe Atopic Dermatitis

A Phase III, Double-Blind, Randomized, 8-Week, Vehicle-Controlled Efficacy and Safety Study of XXX Cream Followed by a Long-Term Safety Extension Period in Adolescents and Adults With Atopic Dermatitis

A Phase IIb, Randomized, Double-Blind, Vehicle-controlled, Parallel-group, Dose Ranging Study to Assess Efficacy, Safety, Tolerability, and Pharmacokinetics of XXX Topical Cream Applied Once or Twice Daily for 12 weeks in Participants with Mild to Moderate Chronic Plaque Psoriasis

A Phase IIb, Randomized, Double Blind, Vehicle Controlled, Parallel Group, Dose Ranging Study to Assess the Efficacy, Safety, Tolerability and Pharmacokinetics of XXX Cream Applied Once or Twice Daily for 6 Weeks in Participants With Mild or Moderate Atopic Dermatitis

A Phase II, Multicenter, Randomized, Placebo-Controlled, Double-Blind Study to Evaluate XXX in Adult and Adolescent Subjects With Moderate to Severe Atopic Dermatitis

INVESTIGATOR EXPERIENCE (continued):

Psoriasis

A Phase II, Randomized, Double-blind, Placebo-controlled, Study to Evaluate the Safety and Efficacy of XXX in Participants with Moderate to Severe Plaque Psoriasis

A Phase III, Multicenter, Single-Arm, Open Label, Assessor-Blinded Study to Assess the Usability of the XXX Autoinjector Combination Product in Adult Patients With Moderate to Severe Plaque Psoriasis

A 52-week, multicenter, randomized, double-blind study of XXX (300 mg) to demonstrate efficacy as assessed by Psoriasis Area and Severity Index and Investigator's Global Assessment after 12 weeks of treatment, compared to XXX, and to assess long-term safety, tolerability, and efficacy in subjects with moderate to severe plaque psoriasis (CLARITY)

Vitiligo

A Phase III, Double-Blind, Vehicle-Controlled, Randomized Withdrawal and Treatment Extension Study to Assess the Long-Term Efficacy and Safety of XXX Cream in Participants With Vitiligo

A Phase III, Double Blind, Randomized, Vehicle-Controlled, Efficacy and Safety Study of XXX Cream Followed by an Extension Period in Participants With Vitiligo

Other Indications

A Phase IIb Multinational, Randomised, Double-blind, Parallel group, 24-week Placebo-controlled Study with 28-week Extension to Investigate the Use of XXX in Patients with Moderate to Severe Chronic Spontaneous Urticaria

APPOINTMENTS:

2017-2018 Phoenix Dermatology Society
President

2014-Present Arizona Dermatology and Dermatologic Surgery Society
Executive Board Member

2012-2016 Dermatitis Editorial Board

2009-Present Journal of Drugs in Dermatology

MEMBERSHIP:

American Academy of Dermatology
American Society for Dermatologic Surgery
American Medical Association (AMA)
Phoenix Dermatology Society
Texas Dermatology Society
Pacific Dermatology Society

GRANT SUPPORT:

American Heart Association Predoctoral Fellowship 07/01/2002-06/30/2004 \$38,000
A Structural and Functional Analysis of Ectromelia Virus Interferon Gamma Binding Protein.

Structural and functional analysis of the ectromelia virus IFN- γ binding protein examined using x-ray crystallography and site directed mutagenesis to identify residues important for promiscuous interaction ligands.

ORAL PRESENTATIONS:

Structure Function Analysis of the Orthopoxvirus IFN-gamma Binding Proteins: Understanding the Expanded Species Specificity and the Non-homologous C-terminus. A.A. Nuara, H. Bai, M.R. Walter, and R.M.L. Buller. Presented at FASEB Poxvirus Summer Research Conference, Palm Springs, CA, June 3-8, 2006.

Analysis of Ligand Binding by the Orthopoxvirus Interleukin-18 and Interferon-gamma Binding Proteins by Surface Plasmon Resonance. Anthony A. Nuara and David J. Esteban. Biacore Users Group Meeting, Donald Danforth Plant Sciences Center, St. Louis, MO. September 23, 2004.

PUBLICATIONS:

Nguyen RH, Nuara AA, Suwattee P, Cockerell CJ, Pandya AG. [Uveitis and desquamating rash of the palms and soles.](#) Am J Dermatopathol. 2013 Jun;35(4):494-5. PMID: 23689695

Glass DA 2nd, Nuara AA. [Whole exome sequencing.](#) Dermatitis. 2013 Jan-Feb;24(1):33-4. PMID: 23340397

Nuara A, Cruz PD Jr. Recall dermatitis at patch test sites in alopecia areata treated with diphencyprone. Dermatitis. 2012 Mar;23(2):98-9. PubMed PMID: 22653133

Stewart L, Nuara A, Anand D, Kia K, Cockerell CJ. "Off centerfold: Perifollicular papules and hyperkeratotic plaques on the back in a Blaschkoid distribution, an atypical presentation of plaque type morphea." Arch Dermatol. 2011 Jul;147(7):857-62. PMID: 21768488

Nuara AA, Obadiah JM, Hurley MY. "Pemphigoid gestationis: cutaneous manifestation of impaired fetal allograft tolerance." Skinmed. 2010 Mar-Apr;8(2):121-3. PMID: 20527151

PUBLICATIONS (continued):

A.A. Nuara, L.J. Walter, N. K. Logsdon, S.I. Yun, B.C. Jones, J.M. Schriewer, R.M.L. Buller and M.R. Walter. "Structure and mechanism of interferon-gamma antagonism by an Orthopoxvirus interferon-gamma binding protein." *PNAS*. 2008 Feb 12;105(6):1861-6. PMID: 18252829

S. Parker, A.A. Nuara, R.M.L. Buller and D.A. Schultz. "Human monkeypox: an emerging zoonotic disease." *Future Microbiol*. 2007 2(1), 17-34. PMID:17661673

I.G. Sakala, G. Chaudhri, R.M. Buller, A.A. Nuara and G. Karupiah. "Poxvirus encoded interferon-gamma binding protein dampens the host immune response to infection." *J Virol*. 2007 Jan 17. PMID: 17229697

M. Hamilton, A.A. Nuara, R.M. Buller and D. Evans. "Duplex strand joining reactions catalyzed by vaccinia virus DNA polymerase." *Nucleic Acids Res*. 2006 Dec 7. PMID: 17158165.

A.A. Nuara, R.M. Buller and H. Bai. "Identification of residues in the ectromelia virus IFN-g binding protein involved in expanded species specificity." *J Gen Virol*. 2007 Jan;88(Pt 1):51-60. PMID: 17170436

A.A. Nuara, H. Bai, N. Chen, R.M. Buller and M.R. Walter. "The unique C-terminus of orthopoxvirus IFN-g binding proteins is essential for ligand binding." *J Virol*. 2006 Nov;80(21):10675-82. PMID: 16928759

M.D. Boyle, J.L. Hess, A.A. Nuara and R.M. Buller. "Application of immunoproteomics to rapid cytokine detection." *Methods* 2006 Apr;38(4):342-50. PMID: 16487723

H. Bai, R.M.L Buller, N. Chen, M. Green and A. Nuara. "Biosynthesis of the IFN-g Binding Protein of Ectromelia Virus, the Causative Agent of Mousepox." *Virology* 334(2005) 41-50. PMID: 15749121

D.J. Esteban, A.A. Nuara and R.M.L. Buller. "Interleukin-18 and glycosaminoglycan binding by a protein encoded by Variola virus" *Journal of General Virology* 85(2004) 1291-1299. PMID: 15105546

M.H. Smith, A.A. Nuara, J.G. Egen, D.B Sirjani, K.S.Lam and W.J. Grimes. "Baculoviral expressed HLA class I heavy chains used to screen a synthetic peptide library for Allele-Specific peptide binding motifs" *Molecular Immunology* 35(1998) 1033-1043. PMID: 10068038

A.A. Nuara "Determining the allele-specific peptide binding motifs of class I HLA molecules using recombinantly expressed protein and a solid phase synthetic peptide library" Senior Thesis at The University of Arizona: William J. Grimes, Advisor.

ABSTRACTS AND POSTERS:

Lichen planopilaris in a patient with Apert syndrome. Dipti Anand, Anthony Nuara, Shurong Chang and Clay Cockerell. Presented at the American Society of Dermatopathology 47th annual meeting, 2010.

Global Transcriptional Profiling of Ectromelia virus-infected Bone-Derived Macrophages from Disease Resistant C57BL/6 and Susceptible A/J Mice. Akbar M. Siddiqui, April Parker, Anthony A. Nuara, Michael Green, and R. Mark L. Buller. Presented at American Society for Virology 25th Annual Meeting, University of Wisconsin-Madison, Madison, Wisconsin. July 15-19, 2006.

Structure Function Analysis of the Ectromelia Virus IFN- γ Binding Protein Using Surface Plasmon Resonance. Anthony A. Nuara, Nanhai Chen, R. Mark L. Buller and Hongdong Bai. Presented at Developments in Protein Interaction Analysis 2005, Philadelphia, Pennsylvania. August 28-31, 2005.

Biosynthesis and Structure Function Analysis of the Ectromelia Virus Interferon Gamma Binding Protein. Anthony A. Nuara, Nanhai Chen, Mark Buller and Hongdong Bai. Department of Molecular Microbiology and Immunology, St. Louis University Health Sciences Center. Presented at American Society for Virology 24th Annual Meeting, Pennsylvania State University, University Park, Pennsylvania. June 18-22, 2005.

D7L, A Variola Protein That Binds Interleukin-18. David J. Esteban, Anthony A. Nuara, R. Mark L. Buller. St. Louis University Health Sciences Center, Department of Molecular Microbiology and Immunology. Presented at American Society for Virology 22nd Annual Meeting, University of California Davis, Davis, California. July 12-16, 2003.

Structural and Functional Analysis of Ectromelia Virus IFN-gamma Binding Protein. Anthony Nuara, Hongdong Bai, Nanhai Chen, R. Mark L. Buller. Department of Molecular Microbiology and Immunology, St. Louis University Health Sciences Center. Presented at XIV Annual Poxvirus and Iridovirus Workshop, Lake Placid, NY. September 20-25, 2002.

Interleukin-1 Receptor Associated Kinase (IRAK) Expression in Natural Killer Cells. A.A. Nuara and J. Kornbluth. Presented at Saint Louis University *AOA* Student Research Forum 2002.

HLA I Peptide Binding Motifs Obtained by Screening a Synthetic Peptide Library with Recombinant Class I Proteins. M.H. Smith, A.A. Nuara, J.E., Egen, K.S. Lam and W.J. Grimes. Presented at Experimental Biology 1998. San Francisco, CA.