Consent Agenda Item D

Memorandum

To: Jon Pennell, Chairperson
State Board of Health
From: Lisa Sherych, Secretary
State Board of Health
Re: Recommended appointment to Medical Laboratory Advisory Committee

Staff Review

On December 5, 2022, a Medical Laboratory Advisory Committee (MLAC) meeting was held by teleconference. With a quorum of members present, one of the action agenda items to consider was to designate a person who meets the requirement of Nevada Revised Statutes 652.170(4)(b), which is to have one physician in private practice as part of the composition of the MLAC. There is currently one such vacant MLAC member position.

There were 27 qualified people who completed and submitted informational documents to indicate an interest in becoming a member of the MLAC. A quorum of the MLAC members reviewed the submitted documents and voted for the person whom the members determined would be the best candidate to fill the physician in private practice vacancy.

With a unanimous vote from a quorum of the members, the person chosen to fill the physician in private practice vacancy was Kennedy Ukadike, M.D, M.S., DABIM.

In accordance with the Nevada Revised Statutes 652.1701(1), it is the responsibility of the State Board of Health to appoint the seven members of the MLAC. Statutorily, the members of the MLAC are allowed to serve two consecutive three-year terms. If approved by the Nevada Board of Health as an MLAC member, Kennedy Ukadike, M.D, M.S., DABIM would be allowed to begin his first three-year term on the MLAC.

Public Comment

There was no public comment received.

Staff Recommendation

The staff recommendation concurs with the quorum of the MLAC members to appoint Kennedy Ukadike, M.D, M.S., DABIM to the vacant physician in private practice member position for a three-year term.

Presenter

Bradley Waples, Acting Manager-Medical Laboratory Services

KENNEDY C. UKADIKE, MD, MS, DABIM
75 Pringle Way, Suite 701, Reno, NV 89502
Phone: (775) 982-3967 / kennedy.ukadike@renown.org

Education:

08/1999 – 07/2001	AS/AA, General Science & Arts, Piedmont Technical College, Greenwood, SC
08/2001 – 12/2003	BS, Biology with Genetics Emphasis, Lander University, Greenwood, SC
09/2005 – 08/2007	MS, Biotechnology & Bioinformatics, California State University Channel Islands, Camarillo, CA
01/2009 – 06/2013	MD, Medicine, Ross University School of Medicine, Portsmouth, Dominica and Miramar, FL

Postgraduate Training:

07/2015 – 06/2016	Internship, Internal Medicine, Englewood Hospital & Medical Center/Icahn School of Medicine at Mouth Sinai, Englewood, NJ
07/2016 – 06/2018	Residency, Internal Medicine, Englewood Hospital & Medical Center/Hackensack University Medical Center, Englewood, NJ
07/2018 – 06/2021	Fellowship, Rheumatology, Physician-Scientist Track, University of Washington School of Medicine, Seattle, WA

Board Certifications:

08/2018 – 08/2028	Internal Medicine, American Board of Internal Medicine, American Board of Medical Specialties
10/2020 – 10/2030	Rheumatology, American Board of Internal Medicine, American Board of Medical Specialties

Licensure & Registration:

06/2011 – 05/2015	United States Medical Licensing Examination Steps 1, 2 (CK & CS), and 3 Passed
04/2015 – present	Centers for Medicare & Medicaid Services, National Provider Identifier Registration
07/2016 – 06/2018	New Jersey State Board of Medical Examiners, Physician Training Permit
04/2018 – 12/2022	Washington State Department of Health, Physician & Surgeon License
05/2018 – 05/2024	Drug Enforcement Administration, Controlled Substance Registration
10/2021 – 06/2023	Nevada State Board of Medical Examiners, Medical Doctor License
12/2021 – 10/2022	Nevada State Board of Pharmacy, Controlled Substance License

Continuing Medical Education:

07/2020 – present	CME Activities for Internal Medicine & Rheumatology, American Medical Association
12/2021 – 12/2023	Basic Life Support & Advanced Cardiovascular Life Support, American Heart Association

Faculty Positions:

08/2013 – 09/2013	Adjunct Instructor, Anatomy & Physiology, Health Sciences Division, North Central State College, Mansfield, OH
07/2020 – 06/2021	Senior Fellow/Acting Instructor, Division of Rheumatology, Department of Medicine, University of Washington School of Medicine, Seattle, WA
07/2021 – 12/2021	Acting Instructor, Division of Rheumatology, Department of Medicine, University of Washington School of Medicine, Seattle, WA
02/2022 – present	Assistant Professor of Clinical Medicine, Department of Internal Medicine, University of Nevada, Reno School of Medicine, Reno, NV

Hospital Positions:

07/2020 – 12/2021	Attending Physician, Section of Rheumatology, University of Washington Med Center, Seattle, WA
07/2020 – 12/2021	Attending Physician, Section of Rheumatology, Harborview Medical Center, Seattle, WA
02/2022 – present	Rheumatologist, Renown Rheumatology, Renown Regional Med Center, Renown Health, Reno, NV

Non-Medical Employment History:

04/2000 – 06/2001	Shipping & Receiving Associate, Piedmont Technical College, Greenwood, SC
09/2000 – 04/2001	Math & Physics Tutor, Piedmont Technical College, Greenwood, SC
09/2001 – 04/2002	Math & Physics Tutor, Lander University, Greenwood, SC
06/2002 – 09/2002	Sales Associate & Cashier, K-Mart Store, Greenwood, SC

06/2002 – 12/2003 Research Intern, Molecular Genetics, J.C. Self Research Institute of Human Genetics, Greenwood Genetic Center, Greenwood, SC
02/2003 – 05/2003 Lab Assistant, Microbiology & Immunology, Department of Biological Sciences, Lander University, Greenwood, SC
03/2003 – 02/2004 Registered Pharmacy Technician, CVS Pharmacy, Greenwood, SC
02/2004 – 08/2005 Research Technologist, Molecular Genetics, J.C. Self Research Institute of Human Genetics, Greenwood Genetic Center, Greenwood, SC
02/2006 – 04/2006 Research Intern, Biologic Molecule Pre-formulation Research, Integrity Biosolutions Inc., Camarillo, CA
04/2006 – 10/2006 Contract Research Associate, Small Molecule Process Development, Amgen Inc./Act-1 Personnel Services, Thousand Oaks, CA
03/2007 – 07/2008 Research Associate, Protein Biochemistry, Transplant Diagnostics, One Lambda Inc./Thermo Fisher Scientific, Canoga Park, CA
09/2013 – 07/2014 Research Associate, Protein Biochemistry, Biologic Molecule Pre-formulation Research, Applied Biomolecular Technologies Inc., Columbus, OH

Extracurricular & Volunteer Activities:

08/2000 – 07/2001 International Student Club Vice President, Piedmont Technical College, Greenwood, SC
09/2001 – 12/2003 International Student Organization Member, Lander University, Greenwood, SC
10/2000 – 10/2000 Voter Registration Drive Coordinator, Piedmont Technical College, Greenwood, SC
10/2002 – 10/2002 Habitat for Humanity House Building Project for Disaster Displaced Families, Greenwood, SC
08/2002 – 03/2003 United Way Fundraising Activities and Day of Caring Event for Girls Scout, Greenwood, SC
04/2005 – 04/2005 March of Dimes Walk America Fundraising Activities, Greenwood Genetic Center, Greenwood, SC
01/2006 – 06/2006 Many Mansions Organization Fundraising and Food Share Program, Thousand Oaks, CA
06/2006 – 06/2006 Red Cross of Ventura County at US Navy Base Seabees Days Event, Port Hueneme, CA
05/2009 – 08/2010 Organization of African Students Community Outreach, Ross University, Portsmouth, Dominica
05/2009 – 08/2010 Intramural Soccer & Basketball Team Player, Ross University, Portsmouth, Dominica
07/2009 – 08/2010 Student National Medical Association Body Tracker Monthly Wellness Clinic, Ross University, Portsmouth, Dominica
08/2011 – 09/2011 Mar Vista Health Center for Physical Medicine & Rehabilitation, Los Angeles, CA
10/2013 – 07/2014 Helping Hands Health & Wellness Center for Uninsured Patients, Columbus, OH
05/2014 – 07/2014 Mount Carmel West Hospital Inpatient Physical Medicine & Rehabilitation, Columbus, OH
08/2014 – 09/2014 Greater Miami Health Education & Training Center Post-Graduate Clerkship in Community Medicine & Women's Health, Miami, FL
09/2014 – 05/2015 Basic Sciences Tutoring to Medical Students from Lincoln Memorial University-DeBusk College of Osteopathic Medicine, Harrogate, TN
07/2016 – 06/2018 Residency Program Evaluation Committee PGY-2 & PGY-3 Resident Class Representative, Englewood Hospital & Medical Center, Englewood, NJ
07/2017 – 06/2018 Patient & Family Advisory Council PGY-3 Resident Class Representative, Englewood Hospital & Medical Center, Englewood, NJ
09/2018 – 06/2020 House Staff Association Member, University of Washington, Seattle, WA
09/2019 – 06/2020 Network of Underrepresented Residents & Fellows, University of Washington, Seattle, WA
10/2019 – 10/2019 Network of Underrepresented Residents & Fellows, University of Washington, Doctor for a Day Event at Chase Lake Elementary School, Edmonds, WA
06/2020 – 06/2020 Network of Underrepresented Residents & Fellows Speed Mentoring Program, Virtual Event, University of Washington, Seattle, WA
07/2020 – 07/2020 Center for Health Equity, Diversity & Inclusion Summer Health Professions Education Program, Virtual Event, University of Washington, Seattle, WA

Academic & Professional Organizations:

09/2001 – 12/2003 Lander Association of Biological Sciences, Lander University, Greenwood, SC
09/2009 – 08/2010 Research Review Society, Ross University School of Medicine, Portsmouth, Dominica
07/2009 – 06/2013 Student National Medical Association Treasurer, Ross University School of Medicine
07/2009 – 06/2013 American Medical Student Association, Ross University School of Medicine
07/2012 – 06/2017 American College of Medical Genetics & Genomics, Student/Resident Member
03/2017 – 06/2018 Society of Hospital Medicine, Resident Member

03/2012 – present American College of Physicians, Student/Resident/Fellow/Attending Member
02/2016 – present American College of Rheumatology, Resident/Fellow/Attending Member
01/2020 – present Federation of Clinical Immunology Societies, Fellow/Attending Member

Honors & Awards:

08/1999 – 07/2001 National Dean's List & College President's/Dean's/Merit Lists, Piedmont Technical College, Greenwood, SC
08/2000 – 07/2001 National Scholars Honor Society, Piedmont Technical College, Greenwood, SC
08/2000 – 07/2001 Phi Theta Kappa Honor Society Vice President for Communications, Piedmont Technical College, Greenwood, SC
08/2000 – 07/2001 Who's Who Among Students in American Junior Colleges, Piedmont Technical College, Greenwood, SC
08/2000 – 07/2001 Distinguished Student Award in Associate of Science, Piedmont Technical College, Greenwood, SC
08/2001 – 07/2002 Talent Roster of Outstanding Transfer Students from Community Colleges, Piedmont Technical College, Greenwood, SC
10/2001 – 10/2001 Featured Community College Student, Index-Journal Newspaper, Greenwood, SC
09/2002 – 12/2003 Blue Key National Honor Fraternity Vice President, Lander University, Greenwood, SC
10/2006 – 10/2006 Employee of the Month Award, Amgen Inc./Act-1 Staffing, Thousand Oaks, CA
04/2008 – 04/2008 Featured Graduate School Alumnus, Bioscope Newsletter Spring Edition, California State University Channel Islands, Camarillo, CA
09/2009 – 08/2010 Progressive Academic Education Program Merit, Ross University School of Medicine, Portsmouth, Dominica & Miramar, FL

Grants & Funding:

08/2000 – 07/2001 Greenwood Rotary Club Scholarship Award, Piedmont Technical College, Greenwood, SC
04/2006 – 04/2006 Biotechnology Institute Travel Award, Biotechnology Innovation Organization 2006 Convention, Chicago, IL
07/2019 – 06/2021 National Institutes of Health T32 Research Training Grant, University of Washington School of Medicine, Seattle, WA
03/2020 – 03/2020 Federation of Clinical Immunology Societies Center of Excellence Travel Award, 2020 Advanced Course in Basic and Clinical Immunology, La Jolla, CA
07/2021 – 12/2021 Diversity Academic Development Scholarship Award, Department of Medicine, University of Washington School of Medicine, Seattle, WA

Clinical Trials Activities:

1. Sub-Investigator, Bristol Myers Squibb's Deucravacitinib in Lupus Nephritis Study: A Phase 2, Randomized, Double-Blind, Placebo-Controlled Study of the Efficacy and Safety of Deucravacitinib in Subjects with Lupus Nephritis on Background Treatment; University of Washington Medical Center, Seattle, WA, Oct 2020 – Dec 2021
2. Sub-Investigator, AbbVie's Upadacitinib in Giant Cell Arteritis Study: A Phase 3, Multicenter, Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Safety and Efficacy of Upadacitinib in Subjects with Giant Cell Arteritis; University of Washington Medical Center, Seattle, WA, Nov 2020 – Dec 2021
3. Sub-Investigator, Bristol Myers Squibb's Abatacept in Rheumatoid Arthritis Investigator-Initiated Study: A Phase 4 Open-Label Study to Evaluate Biomarkers to Predict the Efficacy of Abatacept in Subjects with Rheumatoid Arthritis; University of Washington Medical Center, Seattle, WA, Jan 2021 – Dec 2021
4. Sub-Investigator, UCB's Dapirolizumab Pegol in Systemic Lupus Erythematosus Study: A Phase 3, Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group Study to Evaluate the Efficacy and Safety of Dapirolizumab Pegol in Study Participants with Moderately to Severely Active Systemic Lupus Erythematosus; University of Washington Medical Center, Seattle, WA, July 2021 – Dec 2021

Selected Clinical Procedure Skills:

1. Arthrocentesis and Joint Injection
2. Synovial Fluid Microscopy
3. Musculoskeletal Ultrasound
4. Nailfold Capillaroscopy and Dermatoscopy
5. Punch Biopsy and Skin Suturing
6. Intravenous and Intramuscular Injections

7. Venous and Arterial Blood Sampling
8. Peripheral/Central/Arterial Line Placement
9. Nasogastric Intubation
10. Urinary Catheterization

Research Laboratory Skills:

1. Molecular Biology & Genetics: Cell Culture & DNA/RNA Isolation, DNA/RNA Spectrophotometry/Densitometry, Recombinant DNA Technology, Qualitative & Real-Time Quantitative Polymerase Chain Reaction (PCR), Radionuclide-Incorporation PCR, Agarose Gel Electrophoresis, Single Strand Conformation Polymorphism Electrophoresis, Pulsed Field Gel Electrophoresis, Southern & Northern Blots, Denaturing High Performance Liquid Chromatography (HPLC), and Bioinformatics for DNA/RNA Sequence/Structure Analysis
2. Protein Science & Immunology: Cell Culture & Protein Isolation, Buffer Exchange Dialysis, Osmometry/pH-metry, Colorimetric Protein Assay, Protein Spectrophotometry/Densitometry, Sodium Dodecyl Sulfate-Polyacrylamide Gel Electrophoresis, Western Blot, Enzyme-Linked Immunosorbent Assay, Flow Cytometry, Size-Exclusion/Ion-Exchange/Hydrophobic-Interaction/Reversed-Phase HPLCs, Ion-Exchange Fast Protein Liquid Chromatography, Gravity Column Affinity Chromatography, and Bioinformatics for Protein Sequence/Structure Analysis

Journal Publications:

1. Vervoort VS, Holden KR, Ukadike KC, Collins JS, Saul RA, and Srivastava AK. POMGnT1 Gene Alterations in a Family with Neurological Abnormalities. Annals of Neurology. 2004 July; 56(1):143-148. PMID: 15236414
2. Guzauskas GF, Ukadike KC, Rimsky L, and Srivastava AK. tSNP-based identification of allelic loss of gene expression in a patient with a balanced chromosomal rearrangement. Genomics. 2007 Apr; 89(4):562-565. PMID: 17241765
3. Vincent JB, Choufani S, Horike S, Stachowiak B, Li M, Dill FJ, Marshall C, Hrynchak M, Pewsey E, Ukadike KC, Friedman JM, Srivastava AK, and Scherer SW. A translocation t(6;7)(p11-p12;q22) associated with autism and mental retardation: localization and identification of candidate genes at the breakpoints. Psychiatric Genetics. 2008 June; 18(3):101-109. PMID: 18496206
4. Hefton A, Liang SY, Ni K, Carter V, Ukadike KC, Lood C, and Mustelin T. Autoantibodies against citrullinated serum albumin in patients with rheumatoid arthritis. Journal of Translational Autoimmunity. 2019 Nov 11; 2:100023. PMID: 32743509
5. Carter V, LaCava J, Taylor MS, Liang SY, Mustelin C, Ukadike KC, Bengtsson A, Lood C, and Mustelin T. High Prevalence and Disease Correlation of Autoantibodies Against p40 Encoded by Long Interspersed Nuclear Elements in Systemic Lupus Erythematosus. Arthritis & Rheumatology. 2020 Jan; 72(1):89-99. PMID: 31342656
6. Mustelin T, Ukadike KC, LaCava J, and Taylor M. Reply to the Editor. Arthritis & Rheumatology. 2020 Feb; 72(2):376-377. PMID: 31513363
7. Mustelin T and Ukadike KC. How Retroviruses and Retrotransposons in Our Genome May Contribute to Autoimmunity in Rheumatological Conditions. Frontiers in Immunology. 2020 Nov 13; 11:593891. PMID: 33281822
8. Ukadike KC and Mustelin T. Implications of Endogenous Retroelements in the Etiopathogenesis of Systemic Lupus Erythematosus. Journal of Clinical Medicine. 2021 Feb 19;10(4):856. PMID: 33669709
9. Ukadike KC, Ni K, Wang X, Taylor MS, LaCava J, Pachman LM, Eckert M, Stevens A, Lood CL, and Mustelin T. IgG and IgA autoantibodies against L1 ORF1p expressed in granulocytes correlate with granulocyte consumption and disease activity in pediatric systemic lupus erythematosus. Arthritis Research & Therapy. 2021 May 29; 23(1):153. PMID: 34051843
10. Wang X, Ni K, Hefton A, Ukadike KC, Bowen MA, Eckert M, Stevens A, Lood C, and Mustelin T. Autoantibodies against unmodified and citrullinated human endogenous retrovirus K envelope protein in patients with rheumatoid arthritis. The Journal of Rheumatology. 2021 Aug 1. PMID: 34334364
11. Khadjinova AI, Wang X, Laine A, Ukadike KC, Eckert M, Stevens A, Pachman LM, Bengtsson A, Lood C, and Mustelin T. Autoantibodies against the envelope proteins of endogenous retroviruses K102 and K108 in patients with systemic lupus erythematosus correlate with active disease. Clinical and Experimental Rheumatology. 2021 Oct 13. PMID: 34665695

- PubMed List of Publications: https://pubmed.ncbi.nlm.nih.gov/?term=ukadike+k

Abstracts & Posters:

1. Ukadike KC, Breitbart SI, and Williams KD. Case Report: CHF-like fluid overload from treatment of sickle cell disease acute pain crisis. Society of Hospital Medicine North Jersey Chapter Annual Conference, Hackensack, NJ, Dec 2016

2. Carter B, Ukadike KC, and Galumyan Y. Case Report: A rare fistulating cardiac anomaly with atrial fibrillation and heart failure. American College of Physicians Annual Conference, San Diego, CA, Mar 2017
3. Ukadike KC, Jan LC, and Williams KD. Case Report: Double-positive anti-PR3 and anti-GBM antibodies in an overlap pulmonary-renal syndrome. Society of Hospital Medicine Annual Conference, Las Vegas, NV, May 2017
4. Ukadike KC, Andron RI, and Williams KD. Case Report: Pseudomalignant granulomas in ANCA-negative granulomatosis with polyangiitis. Society of Hospital Medicine Annual Conference, Las Vegas, NV, May 2017
5. Ukadike KC, Dhillon R, Katz J, and Williams KD. Case Report: High IgG4 Antibody Levels in Tissues with Normal Circulating Levels in Serum: A Paradox of IgG4-related Disease. Society of Hospital Medicine Annual Conference, Orlando, FL, Apr 2018
6. Ukadike KC, Aguasvivas MG, Jan LC, and Zelkowitz MS. Case Report: Bilateral Giant Cell Arteritis with Renal ANCA-Associated Vasculitis. American College of Physicians Annual Conference, New Orleans, LA, Apr 2018
7. Ukadike KC, Edo-Osagie E, and Andron RI. Correlation of ESR and CRP with Maintenance Dose Biologics and Disease Activity in Rheumatoid Arthritis: A Retrospective Clinical Utility Study. Annual Research Day at Englewood Hospital & Medical Center, Englewood, NJ, May 2018
8. Ukadike KC, Carter V, LaCava J, Taylor MS, Bengtsson A, Lood C, and Mustelin T. High prevalence and disease correlation of autoantibodies against p40 encoded by long interspersed nuclear elements (LINE-1) in systemic lupus erythematosus. American College of Rheumatology Annual Conference, Atlanta, GA, Nov 2019
9. Ukadike KC, Ni K, Wang X, Taylor MS, LaCava J, Pachman LM, Eckert M, Stevens AM, Lood C, and Mustelin T. IgG and IgA autoantibodies against L1 ORF1p expressed in granulocytes correlate with granulocyte consumption and disease activity in pediatric systemic lupus erythematosus. American College of Rheumatology Annual Convergence, Virtual Event, Nov 2020

Research & Scholarly Activities:

1. Ukadike KC and Srivastava AK. Identification of RAI1 gene defects in patients with Smith-Magenis syndrome and mental retardation (July 2002 – Feb 2004). JC Self Research Institute at Greenwood Genetic Center. Presented at Genetics Research Seminar for BS Biology with Genetics Emphasis at Lander University, Greenwood, SC, Nov 2003
2. Ukadike KC and Srivastava AK. Breakpoint mapping for mutation and expression analyses of vicinal genes affected by three chromosome translocations [ZCCHC7 on chromosome 9p in t(3;9)(q12;p11.2), PKIB on chromosome 6q in t(6;11)(q22.2;q22.2), and unknown genes on chromosomes 2p and 11q in t(2;11)(p21;q23)] respectively in three unrelated patients with multiple congenital anomalies. JC Self Research Institute at Greenwood Genetic Center, Greenwood, SC, Feb 2004 – Aug 2005
3. Ukadike KC and Gillespie B. Protein expression profiling of E. coli using heat shock and nutrient induction to examine molecular chaperone and lac operon activities, respectively. Techniques in Genomics & Proteomics Course for MS Biotechnology & Bioinformatics at California State University Channel Islands, Camarillo, CA, June 2006 – July 2006
4. Ukadike KC and Gillespie B. Overexpression, extraction, purification, quantification, and characterization of recombinant lactate dehydrogenase-A (LDH-A) based on chicken LDH-A structure. Techniques in Genomics & Proteomics Course for MS Biotechnology & Bioinformatics at California State University Channel Islands, Camarillo, CA, June 2006 – July 2006
5. Ukadike KC and Osslund TD. Protein X-ray crystallography of small molecule-inhibited cyclin-dependent kinase-2 (CDK-2) to demonstrate rational drug design for antineoplastic therapy. Molecular Structure Course for MS Biotechnology & Bioinformatics at California State University Channel Islands, Camarillo, CA, Sep 2006 – Dec 2006
6. Ukadike KC, Dyas GL, Cornett CR, and Wang CH. Development of a molecular and structural biology laboratory for the expression and characterization of proteins (Jan 2007 – May 2007). Presented at Capstone Project Course Colloquium for MS Biotechnology & Bioinformatics at California State University Channel Islands, Camarillo, CA, Apr 2007
7. Bazi L, Ukadike KC, and Gottdiener AH. Therapeutic Hypothermia in Post-Cardiac/Respiratory Arrest Care: A Patient Safety Project (Jan 2016 – Mar 2016). Presented at Grand Rounds at Englewood Hospital & Medical Center, Englewood, NJ, Mar 2016
8. Ukadike KC, Serhan M, Hanson H, Hakeem H, Williams KD, and Barnes T. Transition of Care from the ICU to the Ward: A Quality Improvement Project (July 2016 – June 2017). Presented at Grand Rounds at Englewood Hospital & Medical Center, Englewood, NJ, June 2017
9. Ukadike KC and Gottdiener AH. Prevention of Aspiration-Induced Respiratory Failure on PEG Tube: A Patient Safety Project (May 2017 – July 2017). Presented at Grand Rounds at Englewood Hospital & Medical Center, Englewood, NJ, July 2017
10. Ukadike KC and Mustelin T. The Role of LINE-1 in IFN-Mediated SLE Pathogenesis (July 2019 – Dec 2021).

Presented at Division of Rheumatology Works-In-Progress Conference at University of Washington, Seattle, WA, May 2019, Oct 2019, Feb 2020, May 2020, June 2020, Oct 2020, Jan 2021, Apr 2021, and Dec 2021

11. Ukadike KC, Colyer AN, Ni K, Duvvuri B, Taylor MS, LaCava J, Lood C, and Mustelin T. Multiple RNA-binding proteins associated with L1 ORF1p are targeted by the autoimmune response in systemic lupus erythematosus. Work in progress, July 2020 – present
12. Ni K, Smith S, Yacoub M, Ukadike KC, Whitmore L, Laine A, Wang X, Gale M, and Mustelin T. Expression of full-length endogenous retroviruses K102 and K108 in immune cells from patients with rheumatoid arthritis. Work in progress, July 2020 – present
13. Ukadike KC, Coit D, Ni K, Laine A, Najjar R, Wang X, Taylor M, LaCava J, and Tomas Mustelin. L1 retrotransposons induce interferon production in systemic lupus erythematosus neutrophils and are inhibited by reverse transcriptase inhibitors in vitro. Work in progress, July 2020 – present

Scholarly Presentations:

1. Ukadike KC. Chemokine Receptor 5 in HIV Infection. Molecular Cell Biology Course for MS Biotechnology & Bioinformatics at California State University Channel Islands, Camarillo, CA, Dec 2005
2. Ukadike KC. Beyond Gene Expression: Microarray Technologies and Applications in Disease Research and in Research and Development of Human Therapeutics. Special Topics Course for MS Biotechnology & Bioinformatics at California State University Channel Islands, Camarillo, CA, Dec 2006
3. Ukadike KC and Kalanzi J. T Cell Receptor Maturation and Response. Advanced Immunology Course for MS Biotechnology & Bioinformatics at California State University Channel Islands, Camarillo, CA, June 2007
4. Ukadike KC and Kalanzi J. Immune Response to Infectious Diseases. Advanced Immunology Course for MS Biotechnology & Bioinformatics at California State University Channel Islands, Camarillo, CA, June 2007
5. Ukadike KC and Kalanzi J. HIV Research and the Influence of Pharmacogenetics/omics. Pharmacogenomics & Pharmacoproteomics Course for MS Biotechnology & Bioinformatics at California State University Channel Islands, Camarillo, CA, Feb 2007
6. Ukadike KC. Protein Quantification and Affinity Purification Platforms. Biochemistry Department Seminar at One Lambda Inc./Thermo Fisher Scientific, Canoga Park, CA, Oct 2007
7. Ukadike KC. Cystic Fibrosis: Pathogenesis, Pathophysiology, Diagnosis and Treatment. Advanced Introduction to Clinical Medicine Clerkship at Ross University School of Medicine Clinical Campus, Miami, FL, Nov 2010
8. Ukadike KC. Syndromes "R" Us: Pediatric Syndromes. Pediatrics Clerkship Review Lectures at Miami Beach Community Health Center, Miami, FL, Oct 2012
9. Ukadike KC and Rosen DJ. Case Report: Liver Cirrhosis and Gallbladder Carcinoma. Surgery Clerkship Tumor Board at Wyckoff Heights Medical Center, Brooklyn, NY, Mar 2013
10. Ukadike KC and Brody R. Mussel Adhesive Proteins: Promising Medical, Surgical and Dental Applications. Research Seminar at Applied Biomolecular Technologies Inc., Columbus, OH, Mar 2014
11. Ukadike KC. Obstetric Ultrasonography: Principles and Practice. Community Medicine & Women's Health Training at Greater Miami Health Education & Training Center, Miami, FL, Sep 2014
12. Ukadike KC. Infertility: Approach and Considerations. Community Medicine & Women's Health Training at Greater Miami Health Education & Training Center, Miami, FL, Sep 2014
13. Ukadike KC and Tabanor JA. Case Report: Reactive Arthritis. Resident Report Conference at Englewood Hospital & Medical Center, Englewood, NJ, Aug 2015
14. Choi J, Ukadike KC, and Shrestha S. Case Report: Malignant Hypercalcemia in B-Cell Lymphoma. Resident Report Conference at Englewood Hospital & Medical Center, Englewood, NJ, Sep 2015
15. Kang D, Ukadike KC, and Kohn D. Calcium Intake, Bone Mineral Density and Fracture Risk. Journal Club Conference at Englewood Hospital & Medical Center, Englewood, NJ, Nov 2015
16. Ukadike KC. Prognosis of Seronegative vs. Seropositive Arthritis. Evidence-Based Medicine Conference at Englewood Hospital & Medical Center, Englewood, NJ, Mar 2016
17. Park JH, Ukadike KC, and Gordon S. Case Report: Zika Virus Infection. Resident Report Conference at Englewood Hospital & Medical Center, Englewood, NJ, May 2016
18. Ukadike KC. Biosimilar vs. Reference Infliximab in Rheumatoid Arthritis. Evidence-Based Medicine Conference at Englewood Hospital & Medical Center, Englewood, NJ, July 2016
19. Ukadike KC, Budoff G, and Adegbala O. Case Report: CNS Lyme Disease. Resident Report Conference at Englewood Hospital & Medical Center, Englewood, NJ, Aug 2016
20. Banerjee S, Ukadike KC, and Schiffenbauer AI. Case Report: Distal Vacuolar Myopathy in Cystinosis. Grand Rounds at National Institute of Arthritis & Musculoskeletal & Skin Diseases, NIH, Bethesda, MD, Mar 2017
21. Ukadike KC, Patel T, and Gilels S. Case Report: Acute Generalized Exanthematous Pustulosis. Resident Report

Conference at Englewood Hospital & Medical Center, Englewood, NJ, May 2017
22. Ukadike KC. Chondroitin/Glucosamine vs. Celecoxib in Osteoarthritis. Evidence-Based Medicine Conference at Englewood Hospital & Medical Center, Englewood, NJ, Aug 2017
23. Ukadike KC. Methylprednisolone Injection vs. Placebo for Idiopathic Carpal Tunnel Syndrome. Evidence-Based Medicine Conference at Englewood Hospital & Medical Center, Englewood, NJ, Mar 2018
24. Ukadike KC. Overview of the Vasculitides. Internal Medicine Resident Board Review Conference at Englewood Hospital & Medical Center, Englewood, NJ, Apr 2018
25. Ukadike KC. Case Report: Positive Doppler US "Halo Sign" with Negative Temporal Artery Biopsy in GCA. Division of Rheumatology Fellows Case Conference at University of Washington, Seattle, WA, Oct 2018
26. Ukadike KC. TNF-alpha Inhibitors, Immune Globulins, and Calcineurin Inhibitors. Division of Rheumatology Fellows Lecture Series Conference at University of Washington, Seattle, WA, Oct 2018
27. Ukadike KC. Diagnostic Validity of Doppler Ultrasound in Giant Cell Arteritis. Division of Rheumatology Journal Club Conference at University of Washington, Seattle, WA, Jan 2019
28. Ukadike KC. Case Report: Antiphospholipid Syndrome-Associated Diffuse Alveolar Hemorrhage. Adult/Pediatric Rheumatology Combined Case Conference at Seattle Children's Hospital, Seattle, WA, Mar 2019
29. Ukadike KC. Case Report: Secondary Raynaud's Phenomenon with Fingertip Gangrene in Dermatomyositis. Division of Rheumatology Fellows Case Conference at University of Washington, Seattle, WA, Apr 2019
30. Ukadike KC. Case Report: Atherosclerotic Aortic Ulcerations on CTA Mistaken for Aortitis of LVV. Division of Rheumatology Fellows Case Conference at University of Washington, Seattle, WA, Aug 2019
31. Ukadike KC. Trial of Anifrolumab in Active SLE. Division of Rheumatology Journal Club Conference at University of Washington, Seattle, WA, Jan 2020
32. Ukadike KC. Regional Musculoskeletal Medicine: The Knee. Division of Rheumatology Fellows Lecture Series Conference at University of Washington, Seattle, WA, Jan 2020
33. Ukadike KC. Case Report: Chronic Livedo Reticularis of Undetermined Significance. Division of Rheumatology Fellows Case Conference at University of Washington, Seattle, WA, Feb 2020
34. Ukadike KC. Genetic Risk Score Associated with SLE. Division of Rheumatology Journal Club Conference at University of Washington, Seattle, WA, Apr 2020
35. Ukadike KC. Spatiotemporal Analysis of Organ-Specific Lupus Flares. Division of Rheumatology Journal Club Conference at University of Washington, Seattle, WA, July 2020
36. Ukadike KC. Anti-Carbamylated Proteins Antibody Repertoire in Rheumatoid Arthritis. Division of Rheumatology Journal Club Conference at University of Washington, Seattle, WA, July 2020
37. Ukadike KC. Evaluation of Potential Serum Biomarkers of Disease Activity in Vasculitis. Division of Rheumatology Journal Club Conference at University of Washington, Seattle, WA, Dec 2020
38. Ukadike KC. Reverse-Transcribed SARS-CoV-2 RNA can Integrate into the Genome of Cultured Human Cells. Division of Rheumatology Journal Club Conference at University of Washington, Seattle, WA, May 2021
39. Ukadike KC. Large-Scale Characterization of Systemic Sclerosis Serum Protein Profile. Division of Rheumatology Journal Club Conference at University of Washington, Seattle, WA, May 2021
40. Ukadike KC. Regional Musculoskeletal Examination: The Knee-Ankle-Foot. Division of Rheumatology Fellows Kickstart Lecture Series Practical at University of Washington, Seattle, WA, Jul 2021
41. Ukadike KC. The Role of LINE-1 in the etiopathogenesis of SLE. Department of Medicine Grand Rounds, University of Washington, Seattle, WA, Sep 2019
42. Ukadike KC. Genome-wide association study identifies a genetic locus for chronic widespread musculoskeletal pain. Division of Rheumatology Journal Club Conference at University of Washington, Seattle, WA, Nov 2021
43. Ukadike KC. Antiretroviral Drugs as Potential Therapy for Autoimmune Diseases. University of Nevada, Reno School of Medicine Department of Internal Medicine Grand Rounds at Renown Regional Medical Center, Renown Health, Reno, NV, Aug 2022

Consent Agenda Item E

Joe Lombardo
Governor

Richard Whitley, MS
Director

DEPARTMENT OF HEALTH AND HUMAN SERVICES

DIVISION OF PUBLIC AND BEHAVIORAL HEALTH

Helping people. It's who we are and what we do.

Lisa Sherych
Administrator

Ihsan Azzam, Ph.D., M.D.
Chief Medical Officer

MEMORANDUM

DATE: February 16, 2023
TO: Jon Pennell, DMV, Acting Chairman
FROM: Lisa Sherych, Secretary, State Board of Health

RE: Request to Reappoint Christie Elliott, M.D., to the Medical Laboratory Advisory Committee

This is a request from Bureau of Health Care Quality and Compliance (HCQC) staff to reappoint Christie Elliott, M.D., to the Medical Laboratory Advisory Committee (MLAC) to serve a three-year term.

STAFF REVIEW

In accordance with Nevada Revised Statutes NRS 652.170(1), it is the responsibility of the State Board of Health to appoint the seven members of the Medical Laboratory Advisory Committee. Under NRS 652.170(4), the MLAC is composed of: (a) Two pathologists, certified in clinical pathology by the American Board of Pathology; (b) Two medical technologists; (c) One bio analyst who is a laboratory director; (d) One qualified biochemist from the Nevada System of Higher Education; and (e) One licensed physician actively engaged in the practice of clinical medicine in the State. Under NRS 652.170(2)-(3), members are allowed to serve no more than two (2) consecutive three-year terms.

HCQC administers the MLAC, which includes overseeing the process of ensuring the MLAC seats are filled. Christie Elliott, M.D., served her first term on the MLAC from 12/06/2019 – 12/06/2022. HCQC staff confirmed her interest by email in serving a second term.

STAFF RECOMMENDATION

HCQC staff request the Board of Health reappoint Christie Elliott, M.D., serving as a pathologist certified in clinical pathology by the American Board of Pathology (NRS 652.170(4)(a)) to a second three-year term to run 12/06/2022 – 12/06/2025. Her resume is included for your reference.

PRESENTER

Bradley Waples, B.S. MT(ASCP)
Acting Manager | Medical Laboratory Services
Division of Public and Behavioral Health

Cell Phone: (775) 750-7560
Work Phone: (775)982-4545
E-Mail: celliott@renown.org

Christie L. Elliott, M.D.

Work Experience

July 2008 – Present
Sierra Pathology Associates, Inc.
Surgical Pathologist
Staff Pathologist – Renown Regional Medical Center
Medical Director of Lab, 2013 - Present

July 2007 – July 2008
Assistant Professor of Pathology
University of Nevada School of Medicine
Surgical pathologist & pathology instructor

September 2006 – June 2007
Christie L. Elliott, M.D., LLC
Independent contractor with Sierra Pathology Associates, Reno, NV
Surgical pathologist

July 2002 – August 2006
Forensic Pathology Consultants, Reno, NV
Forensic pathologist

Medical Directorships:

Renown Regional Medical Center Laboratory – 2013 to Present
Renown Rehabilitation Hospital – 2013 to Present

Training/Education

July 2001- 2002
Fulton County Medical Examiner, Atlanta, GA
Forensic Pathology Fellowship

July 1996 –2001
University of Colorado Pathology Residency, Denver, CO
Anatomic and Clinical Pathology Residency

August 1992 – May 1996
University of Nevada School of Medicine (UNSOM)
M.D. completed May 1996

August 1987 – May 1992
University of Nevada, Reno
B.S. in Pre-medical Studies, completed May 1991

Teaching Activities

2005 - present
Clinical Faculty – UNRSOM Dept. of Pathology (Clinical Associate Prof)

2002 – 2006

Guest lecturer
-UNSOM 2nd year class
- National Judicial College, Reno, NV

2002 – 2006
Provided hands-on instruction of 3rd & 4th year medical students rotating in pathology, paramedic & nursing students, and coroner trainees
Washoe County Coroner's Office, Reno, NV

2003 – 2006
Noon conferences and Morbidity & Mortality conferences
UNSOM Internal Medicine Residency
2003 – 2006
Mentor for Carson High School Senior Project students

1997 – 2001
Lab instructor Pathology 6000 (2nd year medical students)
University of Colorado School of Medicine
Received Excellence in Teaching Award: 1997 thru 2001

Invited Lectures

"Who says the autopsy isn't useful?"
UNSOM Internal Medicine Residency

"Forensic Pathology Primer"
Annual Scientific Evidence & Expert Testimony Course
National Judicial College, Reno, NV

"Meningitis mimicking shaken baby syndrome"
American Academy of Forensic Sciences Annual Meeting
Dallas, TX February 2004

Leukocyte-reduced Blood Products: Indications and Benefits. Colorado Society of Clinical Laboratory Sciences,
May, 1999

Continuing Medical Education lecture series for the University of Colorado at Boulder Student Health Services laboratory staff,
1996 – 1999

Licensures & Certifications

Nevada State Medical License – 2002 (Active)
California State Medical License – 2008 (Active)
Georgia State Medical License – 2001 (Inactive)

Board Certifications:
-Forensic Pathology – 2002
-Anatomic & Clinical Pathology - 2001

Professional Memberships	American Society of Clinical Pathologists College of American Pathologist
Service	Chief of Staff, Renown Regional Medical Center 7/2020-present Vice Chief of Staff, Renown Regional Medical Center, 1/2020-6/2020 Secretary of Staff, Renown Regional Medical Center, 1/2018-12/2019 Medical Laboratory Advisory Committee, 2019- present UNSOM Out of state admissions committee (3 years) UNSOM Mentor Program Teaching and mentor activities on volunteer basis
Publications	Elliott, C, Thompson H. Transfusion protocols for optimized blood usage during orthotopic liver transplantation. ASCP Check Sample, Transfusion Medicine No. TM 01-1 (TM-245). Stephens J, Everson G, Elliott C, et al. Fatal transfer of malignant melanoma from multiorgan donor to four allograft recipients. *Transplantation*. 2000 July 15; 70 (1);232-6. Abstract presented at U.S. and Canadian Academy of Pathology annual meeting Feb/March 1998, Boston, MA.

Consent Agenda Item F

Joe Lombardo
Governor

Richard Whitley, MS
Director

DEPARTMENT OF HEALTH AND HUMAN SERVICES

DIVISION OF PUBLIC AND BEHAVIORAL HEALTH

Helping people. It's who we are and what we do.

Lisa Sherych
Administrator

Ihsan Azzam, Ph.D., M.D.
Chief Medical Officer

MEMORANDUM

DATE: February 16, 2023
TO: Jon Pennell, DMV, Acting Chairman
FROM: Lisa Sherych, Secretary, State Board of Health

RE: Request to Reappoint David Marmaduke, M.D., to the Medical Laboratory Advisory Committee

This is a request from Bureau of Health Care Quality and Compliance (HCQC) staff to reappoint **David Marmaduke, M.D.**, to the Medical Laboratory Advisory Committee (MLAC) to serve a three-year term.

STAFF REVIEW

In accordance with Nevada Revised Statutes NRS 652.170(1), it is the responsibility of the State Board of Health to appoint the seven members of the Medical Laboratory Advisory Committee. Under NRS 652.170(4), the MLAC is composed of: (a) Two pathologists, certified in clinical pathology by the American Board of Pathology; (b) Two medical technologists; (c) One bio analyst who is a laboratory director; (d) One qualified biochemist from the Nevada System of Higher Education; and (e) One licensed physician actively engaged in the practice of clinical medicine in the State. Under NRS 652.170(2)-(3), members are allowed to serve no more than two (2) consecutive three-year terms.

HCQC administers the MLAC, which includes overseeing the process of ensuring the MLAC seats are filled. David Marmaduke, M.D., served his first term on the MLAC from 12/06/2019 – 12/06/2022. HCQC staff confirmed his interest by email in serving a second term.

STAFF RECOMMENDATION

HCQC staff request the Board of Health reappoint David Marmaduke, M.D., serving as a pathologist certified in clinical pathology by the American Board of Pathology (NRS 652.170(4)(a)) to a second three-year term to run 12/06/2022 – 12/06/2025. His resume is included for your reference.

PRESENTER

Bradley Waples, B.S. MT(ASCP)
Acting Manager | Medical Laboratory Services
Division of Public and Behavioral Health

Business Address:
Laboratory Medicine Consultants
7455 W. Washington Ave., Ste 301
Las Vegas, NV 89128
Phone: 702-732-3441
Email: dmarmaduke@sonichealthcareusa.com

David P. Marmaduke, M.D.

Current Position: **Chair, Department of Pathology and Laboratory Director, Sunrise Hospital Medical Center and Sunrise Children's Hospital**
Director, Point of Care Testing, Sunrise Hospital Medical Center
Pathologist, Laboratory Medicine Consultants, Las Vegas, NV

Education

1994-1996	**Hematopathology Fellow**, University of New Mexico Health Sciences Center and Center for Molecular and Cellular Diagnostics, Albuquerque, NM
1993-1994	**Hematopathology Fellow and Baba Fellow of Pathology**, The Ohio State University Hospitals, Columbus, OH
1988-1993	**Resident in Anatomic and Clinical Pathology and Chief Resident (1993),** The Ohio State University Hospitals, Columbus, OH
1984-1988	**The Ohio State University College of Medicine, Columbus, OH**

Board Certification

1996	**Subspecialty certification in Hematology**, American Board of Pathology (SQ-96-053)
1994	**Diplomate, American Board of Pathology**, Anatomic and Clinical Pathology (94-094)
1988	**Diplomate, National Board of Medical Examiners** (356965)

Licensure

2014-present	Alabama (SP.91)
2008-present	Utah (6777760-1205)
2007-present	Arizona (37767)
2002-present	Nevada (10192)
2002-present	California (G86741)
1996-present	Maine (14402), inactive
1994-present	Ohio (66478)
1994-present	New Mexico (94-320), inactive

Professional Society Memberships Since

2002	Nevada Society of Pathologists
2002	Nevada State Medical Association
2002	The Clark County Medical Society
1996	American Society of Clinical Pathologists
1995	Society for Hematopathology
1992	United States and Canadian Academy of Pathology
1988	College of American Pathologists

Academic Appointments

1997-2002	**Adjunct Professor**, Department of Zoology, University of Maine, Orono, ME
1995-1996	**Clinical Instructor III**, University of New Mexico Health Sciences Center, Albuquerque, NM

Committee Appointments Since

2019-present	**Medical Laboratory Advisory Committee**, State Board of Health for Nevada, Reno, NV
2015-present	**Cancer Committee**, Sunrise Hospital, Las Vegas, NV
2014-present	**Medical Executive Committee**, Sunrise Hospital, Las Vegas, NV
2008-present	**Trauma Committee**, Sunrise Hospital, Las Vegas, NV
2006-2010	**Medical Laboratory Advisory Committee**, State Board of Health for Nevada, Reno, NV
2004-2010	**Chair**, **Infection Control Committee**, Sunrise Hospital, Las Vegas, NV
2004-2012	**Chair**, **Blood Usage Committee**, Sunrise Hospital, Las Vegas, NV
2000-2002	**Cancer Committee**, Eastern Maine Medical Center, Bangor, ME
2000-2002	**Trauma Committee**, Eastern Maine Medical Center, Bangor, ME

Medical Directorships

2004-present	**Medical Director, Point of Care, Sunrise Hospital, Las Vegas, NV**

Professional Experience

2014-present	**Chair, Department of Pathology and Laboratory Director, Sunrise Hospital Medical Center and Sunrise Children's Hospital**
2007-present	**Laboratory Director, Comprehensive Cancer Centers of Nevada, 1505 Wigwam Pkwy, Suite 130 Henderson, NV 89074**
2004-present	**Laboratory Director, Parkway Surgery Center, Las Vegas, NV**
2004-2008	**Director, CORE Laboratory, Sunrise Hospital and Medical Center & Sunrise Children's Hospital, Las Vegas, NV** High complexity laboratory serving 700 bed community hospital and Children's Hospital
2003-2008	**Laboratory Director, Surgery Centers of Southern Nevada, Las Vegas, NV**
2000-2002	**Laboratory Director, Chapman Laboratory, Millinocket Regional Hospital, Millinocket, ME** High complexity laboratory serving 50 bed rural hospital.
2000-2002	**Laboratory Director, Inland Hospital, Waterville, ME** High complexity laboratory serving 50 bed urban Osteopathic hospital.
1996-2002	**Pathologist, Dahl-Chase Pathology Associates, Bangor, ME**
1996-2002	**Medical Director, Flow Cytometry Lab, Dahl-Chase Diagnostic Services, Bangor, ME** State of the art lab performing complex flow cytometry studies including leukemia/lymphoma, immunodeficiency, minimal residual disease, peripheral stem cell quantitation and DNA ploidy analysis
1996-2002	**Medical Director, Hematology Lab, Affiliated Laboratories Inc.,**

Bangor, ME
High volume, high complexity hematology laboratory employing 22 medical technologists serving Eastern Maine Medical Center as well as multiple outside laboratories.

Pathology Society Offices Held

1999-2001	**President, Maine Society of Pathologists**
1990-1992	**Ohio Delegate, College of American Pathologists Resident's Forum**

Teaching Experience

1997- 2002	**Medical Director, Eastern Maine Medical Center Medical Technology Program, Bangor, ME**
1994-1995	**Med II Pathology Laboratory Instructor (Hematology**), The University of New Mexico Health Sciences Center, Albuquerque, NM
1994-1995	**Med I Pathology Laboratory Instructor (Phase I-1 and I-2**), The University of New Mexico Health Sciences Center, Albuquerque, NM
1992-1993	**Pathology 501 (Hematology**), School of Allied Medical Professions, The Ohio State University Hospitals, Columbus, OH
1991-1993	**Introduction to Clinical Medicine Tutorials**, The Ohio State University College of Medicine, Columbus, OH
1991-1993	**Med II Pathology Laboratory Instructor**, The Ohio State University College of Medicine, Columbus, OH
1988-1993	**Lecture Series, Allied Medicine 505 (Principles of Disease)**, School of Allied Medical Professions, The Ohio State University, Columbus, OH
1981-1982	**Chemistry Teaching Assistant**, DePaul University, Chicago, IL

Invited Plenary/Symposia Speaker

1999	Laboratory Diagnosis of Iron-related Disorders. Northeast Regional Joint Fall Conference, Portland, ME (October)
2000	WHO Classification of Acute Myeloid Leukemia/Myelodysplasia. Northeast Regional Joint Fall Conference, Portland, ME (September)
1999	Heparin-induced thrombocytopenia. Northeast Regional Joint Fall Conference. Portland, ME (September)
1997	Bone Marrow Evaluation. Maine Society for Histotechnology, Saint Joseph's Hospital, Bangor, ME (April)
1997	Hemolytic anemias. Dahl-Chase Pathology Hematology Network Seminar, Bangor, ME

1993	FcγRII interactions in heparin-induced thrombocytopenia. XIVth International Congress on Thrombosis and Haemostasis, New York, NY
1991	Cutaneous infections. South Central Association for Clinical Microbiology (SCACM), South Bend, IN

Lectureship

2000	Heparin-induced thrombocytopenia. Grand Rounds, Eastern Maine Medical Center, Bangor, ME (November)
1998	Flow Cytometry in Clinical Diagnosis. Pediatric Conference, Eastern Maine Medical Center, Bangor, ME (May)
1996	Clonality Studies in Histiocytic Disorders. Tumor Marker Conference, University of New Mexico Health Sciences Center, Albuquerque, NM
1996	Peripheral T-cell Lymphomas. Tumor Marker Conference, University of New Mexico Health Sciences Center, Albuquerque, NM (February)

Research Experience

1994-96	Application of the Human Androgen Receptor (HUMARA) Clonality Assay to Sinus Histiocytosis with Massive Lymphadenopathy (Rosai - Dorfman Disease). The University of New Mexico Cancer Center, Albuquerque, NM. **Cheryl L. Willman, M.D.**
1992-93	Interactions of the Platelet FcγRII Receptor with Heparin: Relationship to Heparin-Dependent Thrombosis. The Ohio State University Hospitals, Columbus, OH. **John T. Brandt, M.D**.
1992-93	Digital Morphometry of Prostatic Adenocarcinoma: Correlation with Ultrasound Volumetric Measurement, Serum Prostate Specific Antigen, and Clinical Stage. The Ohio State University Hospitals, Columbus, OH. **William L. Marsh, M.D.**
1981-83	Ontogeny of the Hypothalamo-Hypophyseal-Gonadal Axis in the Chick Embryo. DePaul University, Chicago, IL. **James Woods, Ph.D.**

Scholarships and Awards

1995	College of American Pathologists Scholar's Award ($25,000)
1995	American Cancer Society Clinical Oncology Fellow (COF95-107-1, $5,000)
1994	American Cancer Society Clinical Oncology Fellow (COF94-120-1, $10,000)
1988	Emmerich von Haam Pathology Award
1988	Department of Medicine Award

Publications

Original Articles

Peller PA, Young DC, **Marmaduke DP**, Marsh WL, Badalament RA. Sextant prostate biopsies: A histopathologic correlation with radical prostatectomy specimens. Cancer 75:530-538, 1995.

Marmaduke DP, Greenson JK, Cunningham I, Herderick EE, Cornhill JF. Gastric antral vascular ectasia in patients undergoing bone marrow transplantation. Am J Clin Pathol 102: 194-198, 1994.

Marmaduke DP, Brandt JT, Theil KS. Rapid diagnosis of cytomegalovirus in the cerebrospinal fluid of a patient with AIDS-associated polyradiculopathy. Arch Pathol Lab Med 115:1154-1157, 1991.

Textbook/Chapters

Marmaduke DP and Doing KM. Infections of the central nervous system. In Textbook of Diagnostic Microbiology (2nd ed), Manuselis and Mahon, editors, W.B. Saunders, pp. 974-995, 2000.

Marmaduke DP and Ayers LW. Infections of the central nervous system. In Textbook of Diagnostic Microbiology, Manuselis and Mahon, editors, W.B. Saunders, pp. 915-934, 1995

Abstracts

DP Marmaduke, J Rosai, R Warnke, K Foucar, MR Emmert-Buck, LA Liotta and CL Willman. Molecular assessment of clonality in sinus histiocytosis with massive lymphadenopathy (SHML): A reactive disorder of polyclonal histiocytes. Mod Pathol 9(1):117A, 1996.

NE Joste, RM Feddersen, K Butler, **DP Marmaduke**, E Foucar and CL Willman. Molecular assessment of clonality at the HUMARA locus by microdissection of archival invasive ductal carcinoma. Mod Pathol 9(1):172A, 1996

Marmaduke DP, Anderson CL, Brandt JT. Heparin potentiates FcR - mediated platelet aggregation. Thromb Haemostas 69(6):2320, 1993.

Qualman SJ, Pawel B, Li B, **Marmaduke D**, Sferra T. Putative etiologic factors in Menetrier's disease; evidence of cytomegalovirus infection in pediatric versus adult cases. Pediatr Pathol 13:107, 1993.

Marmaduke D, Greenson J, Cunningham I, Herderick E, Cornhill F. Superficial antral vascular ectasia in bone marrow transplant patients. Mod Pathol 5(1):45A, 1992.

Cunningham I, **Marmaduke D**, Copelan E, Tutschka P. Hyperbilirubinemia as a predictor of post-BMT mortality. Blood 78(10), Suppl 1:240a, 1991.

Marmaduke DP, Neff JC, Kirkpatrick R. Antibody to hepatitis C virus is not predictive of a characteristic subset of patients with chronic hepatitis. Am J Clin Pathol 95:276, 1991.

Consent Agenda Item G

MEMORANDUM

DATE: February 16, 2023
TO: Jon Pennell, DMV, Acting Chairman
FROM: Lisa Sherych, Secretary, State Board of Health

RE: Request to Reappoint Jill Brown, MT, to the Medical Laboratory Advisory Committee

This is a request from Bureau of Health Care Quality and Compliance (HCQC) staff to reappoint Jill Brown, MT, to the Medical Laboratory Advisory Committee (MLAC) to serve a three-year term.

STAFF REVIEW

In accordance with Nevada Revised Statutes NRS 652.170(1), it is the responsibility of the State Board of Health to appoint the seven members of the Medical Laboratory Advisory Committee. Under NRS 652.170(4), the MLAC is composed of: (a) Two pathologists, certified in clinical pathology by the American Board of Pathology; (b) Two medical technologists; (c) One bio analyst who is a laboratory director; (d) One qualified biochemist from the Nevada System of Higher Education; and (e) One licensed physician actively engaged in the practice of clinical medicine in the State. Under NRS 652.170(2)-(3), members are allowed to serve no more than two (2) consecutive three-year terms.

HCQC administers the MLAC, which includes overseeing the process of ensuring the MLAC seats are filled. Jill Brown, MT, served her first term on the MLAC from 12/06/2019 – 12/06/2022. HCQC staff confirmed her interest by email in serving a second term.

STAFF RECOMMENDATION

HCQC staff request the Board of Health reappoint Jill Brown, MT, serving as a medical technologist (NRS 652.170(4)(b)) to a second three-year term to run 12/06/2022 - 12/06/2025. Her resume is included for your reference.

PRESENTER

Bradley Waples, B.S. MT(ASCP)
Acting Manager | Medical Laboratory Services
Division of Public and Behavioral Health

Jill Brown, MLS(ASCP)^{cm}

Northeastern Nevada Regional Hospital
2001 Errecart Blvd.
Elko, Nevada 89801
775-748-2110
775-748-2111

Objective	**To serve on the Medical Laboratory Advisory Committee**

Background Summary

Laboratory supervisor with extensive experience in directing, supervising and coordinating technical functions and activities in all clinical areas of a small rural hospital laboratory. Related areas of expertise are:

- Medical staff consults
- Investigation of new equipment or methodologies
- Management of point of care and proficiency testing
- Establishing and implementing policy and procedure
- Maintaining compliance with current accreditation and regulation requirements

Experience

Northeastern Nevada Regional Hospital General Supervisor	**Since 1985**
College of Southern Nevada Part-time Phlebotomy Instructor	**Since 1999**
MLAC member	**2000-2006** **2008-2014** **2020-2023**

Reference

George Mardini, MD
Medical Director
Northeastern Nevada Regional Hospital
2001 Errecart Blvd.
Elko, Nevada 89801

Consent Agenda Item H

Joe Lombardo
Governor

Richard Whitley, MS
Director

DEPARTMENT OF HEALTH AND HUMAN SERVICES

DIVISION OF PUBLIC AND BEHAVIORAL HEALTH

Helping people. It's who we are and what we do.

Lisa Sherych
Administrator

Ihsan Azzam, Ph.D., M.D.
Chief Medical Officer

MEMORANDUM

DATE: February 16, 2023
TO: Jon Pennell, DMV, Acting Chairman
FROM: Lisa Sherych, Secretary, State Board of Health

RE: Request to Reappoint Alexander Stojanoff, Ph.D., to the Medical Laboratory Advisory Committee

This is a request from Bureau of Health Care Quality and Compliance (HCQC) staff to reappoint **Alexander Stojanoff, Ph.D.**, to the Medical Laboratory Advisory Committee (MLAC) to serve a three-year term.

STAFF REVIEW

In accordance with Nevada Revised Statutes NRS 652.170(1), it is the responsibility of the State Board of Health to appoint the seven members of the Medical Laboratory Advisory Committee. Under NRS 652.170(4), the MLAC is composed of: (a) Two pathologists, certified in clinical pathology by the American Board of Pathology; (b) Two medical technologists; (c) One bio analyst who is a laboratory director; (d) One qualified biochemist from the Nevada System of Higher Education; and (e) One licensed physician actively engaged in the practice of clinical medicine in the State. Under NRS 652.170(2)-(3), members are allowed to serve no more than two (2) consecutive three-year terms.

HCQC administers the MLAC, which includes overseeing the process of ensuring the MLAC seats are filled. Alexander Stojanoff, Ph.D., served his first term on the MLAC from 12/06/2019 – 12/06/2022. HCQC staff confirmed his interest by email in serving a second term.

STAFF RECOMMENDATION

HCQC staff request the Board of Health reappoint Alexander Stojanoff, Ph.D., serving as a qualified biochemist from the Nevada System of Higher Education (NRS 652.170(4)(d)) to a second three-year term to run 12/06/2022 – 12/06/2025. His resume is included for your reference.

PRESENTER

Bradley Waples, B.S. MT(ASCP)
Acting Manager | Medical Laboratory Services
Division of Public and Behavioral Health

ALEXANDER STOJANOFF, PhD, MSc, HCLD

Résumé

EXECUTIVE MANAGEMENT

Biotech and Clinical Diagnostic Testing

Alexander Stojanoff, PhD, MSc, HCLD

220 Hickory Hollow Avenue ▪ Las Vegas, NV 89123
702-497-1732 ▪ alexstojanoff@aol.com

EXECUTIVE MANAGEMENT

Biotech and Clinical Diagnostic Testing

Very passionate professional focused on all the concerns of individuals, families and communities so they attain, maintain or recover optimal wellbeing and quality of life from birth to end of life. Extensive experience in a variety of specialties as program director or as part of a team to assess, plan, implement and evaluate all arenas of medical care. Professional in the science and art of preventing disease, prolonging life and promoting health. Direct the overall operation and administration of the laboratory, including the employment of competent qualified personnel. Govern policies, processes, procedures, research, and resources needed to achieve consistent, high quality testing services. Masterful at integrating medical health information services, regulation compliance, medical education, cost control, and project management to achieve organizational goals. Develop, design, improve, and manage systems that create and deliver the organization's products or services. Ensure quality care for all, while maintaining credentials, code of ethics, standards and competencies, and continuing education. Provide academic, vocational, behavioral, and social education generating overall enrichment.

- Academic Instructor
- Curriculum Design
- Process Improvement
- Health/Safety Programs
- Financial Management
- Found Businesses
- Method Improvements
- Hospital/Clinic/Lab/Field
- Fertility/Toxicology/Pain
- Pathology/Immunology
- OBGYN/Biochemistry
- Infection/Disease Control
- Multi-site Management
- JCAHO/CLIA/HIPAA
- Budget Administration
- R&D/Staff Supervision
- Publish/Present Data
- HR/Best Practices
- C-Level Client Relations
- High-Yield Profits
- TQM/Lean Six Sigma

CAREER EXPERIENCE

THE WORLD EGG AND SPERM BANK, Scottsdale, AZ 2022-Present

Manage laboratory functions and processes, scientific affairs, and with the growth and success of TWESB

Chief Scientific Director/Innovation Officer

Key Accomplishments and Responsibilities

- Plan the first annual conference of The World Egg and Sperm Bank
- Management of all laboratory functions
- Provide training and oversight of laboratory verification process
- On-site laboratory training and oversight of vitrification when needed
- Communicate and answer technical questions from clinics
- Review and modify all SOP's related to laboratory duties on a yearly or as needed
- basis
- Provide support to The World Egg and Sperm Bank staff relating to technical
- questions
- Oversee data from each laboratory clinic
- Implement quality control and quality assurance protocols and procedures
- Member of the company's Scientific Advisory Board
- Member of TWESB Quality Control Committee
- Promote TWESB through TWESB organized marketing
- Conduct and participate in approved research studies
- Conduct data analysis annually and on an as needed basis
- Travel/attend conferences when needed

220 Hickory Hollow Avenue ▪ Las Vegas, NV 89123
702-497-1732 ▪ alexstojanoff@aol.com

CLINICAL LABORATORIES HOLDING COMPANY, INC; Las Vegas, NV 2008-Present

Provides its fertility centers with finance, HR, risk management, legal and sales support services

CEO and Laboratory Director

Key Accomplishments and Responsibilities

Established successful clinical management firm acquiring and growing fertility practices nationwide including clinical diagnostic and toxicology labs. CLIA Lab Director for: MD Labs,, Reno, NV #29D2032647, Nevada Advanced Pain Specialists, Reno, NV #29D2058647, Innovative Pain Care Specialists, Las Vegas, NV #29D2076312.

Fertility Labs:

- Created a 7500-sq. ft. state-of-the-art reproductive fertility clinic in Fairfax, VA.
- Provide complete ambulatory surgery center operations conducting in excess of 200 invitro fertilization procedures and transfers annually.
- Established consistent, outstanding pregnancy rates (≥50%) for fresh and frozen embryo transfers for infertile couples.
- Increased year-over-year net profit 20% by initiating Internet, print, radio, TV campaigns.
- Liaison with teams ensuring support for corporate mission, vision, values, and objectives.
- Increased new patient volume and transaction price via new incentive programs.
- Initiated genetic testing – preimplantation genetic diagnosis and screening on older female patients and patients with multiple cycle failures

Toxicology Labs:

- Established a 10,000-sq. ft. high complexity laboratory with emphasis on drug testing, metabolism and pharmacology in urine using EIA and LC-MS instrumentation.
- Setup high-tech main labs supporting testing menu encompassing over 40 analytes with more than 150,000 requisitions annually.
- Supervised, trained, mentored, and evaluated over 15 state licensed lab technologists.
- Validated for oral fluid (24-analytes panel) and initiated pharma genetics pan

220 Hickory Hollow Avenue ▪ Las Vegas, NV 89123
702-497-1732 ▪ alexstojanoff@aol.com

CLS LABS, INC; Las Vegas, NV 1997-2007

Provides clinical laboratory testing on human specimens, tissue, blood, urine, stool, sputum.

CEO and Laboratory Director

Key Accomplishments and Responsibilities

- Built successful, high complexity 24/7 clinical reference laboratory with multiple Las Vegas sites along with facilities in 3 other Nevada cities.
- CLS certifications: hematology, chemistry, immunohematology, diagnostic immunology, bacteriology, parasitology, and histocompatibility.
- Hired, mentored, and supervised up to 150 staff/management personnel.
- Created a 17,000-sq. ft. lab to support menu of 100 plus testing options; conducted over 500,000 tests with more than 50,000 requisitions annually.
- Generated preeminent market positioning achieving $4.5 million annually outproducing the largest lab worldwide.
- Drove YOY revenue 37% while improving lean management operational profit 21%.
- Initiated first national FDA-approved fertility screening testing program for all potential egg and sperm donors in the U.S.
- Initiated first Nevada successful mobile phlebotomy service and molecular lab testing facility.
- Developed molecular lab testing for infectious diseases.
- Performed initial fetal fibronectin lab test in Nevada.
- Designated preferred testing lab for Nevada Donor Network.
- Positioned to acquire largest lab in the world – Sonic Health Care of Australia in 2007.

UNIVERSITY of NEVADA-RENO; Las Vegas, NV 1993-1997

School of Medicine is located next to 2 hospitals – one of which has the only Level I trauma center in Nevada

Scientific/Laboratory Director – Asst. Professor OBGYN Dept.

Key Accomplishments and Responsibilities

- Recruited specifically to established new IVF program for the university which encompassed all aspects of embryology and andrology.
- Instructed 50 one-three year medical students and 7 OBGYN residents.
- Applied expertise to Guadalajara, Mexico and obtained 55% pregnancy rate – highest ever for women under 35.

ALVARADO HOSPITAL and MEDICAL CENTER; San Diego, CA 1993

A 306-bed acute care hospital offering advanced, specialized healthcare services

Scientific/Laboratory Director

Key Accomplishments and Responsibilities

- Setup hospital's first IVF program and IVF lab; and managed all functions including staffing, training, quality control measures, SOP's, and regulation compliance.
- Competed successfully with 5 other IVF programs in San Diego area; achieved exceptional pregnancy rates exceeding 40% overall.

220 Hickory Hollow Avenue ▪ Las Vegas, NV 89123
702-497-1732 ▪ alexstojanoff@aol.com

FORMAL EDUCATION (all degrees are US accredited)

UNIVERSITY of MELBOURNE Victoria, Australia
Doctor of Philosophy Degree in Obstetrics and Gynecology
Bachelor of Science Degree in Pathology (w/Honors)

MONASH UNIVERSITY Victoria, Australia
Master of Science Degree in Obstetrics and Gynecology
Bachelor of Science Degree in Immunology and Biochemistry

LICENSURE/CERTIFICATION

American Board of Bioanalysis – High Complexity Laboratory Director
Nevada Laboratory State License
CLIA Laboratory Certificate of Compliance
Nevada Licensed Laboratory Director

PROFESSIONAL AFFILIATIONS

Society for Study of Reproduction
American Society for Reproductive Medicine
Fertility Society of Australia

PRESENTATIONS (select)

AAB College of Reproductive Biology's Andrology and Embryology Review Course and Quality Assurance/Quality Control Workshop, ART Laboratories, Grapevine, TX (2004)

Workshop Director, Challenges toward the Year 2000, Micromanipulation Workshop, Las Vegas, NV

Alvarado Hospital Medical Center, Dr. Steven Brody, San Diego, CA (1993)

IVF Clinic, Director, Carl Hamilton, MD, King Faisal Specialist Hospital and Research Center, Riyadh, Saudi Arabia (1992)

Department of Veterinary Physiology, Professor M. Mattioli, University of Bologna, Italy (1989)

PUBLICATIONS (select)

The Phospholipid Composition of Isolated Guinea Pig Plasma Membrane and Outer Acrosome Membranes during Capacitation in Vitro. Stojanoff, A. Bourne, H. Andrews, A.G. Hyne,R.V. Garn, Res. 21297-311, 1988

Pregnancy from Vitro Fertilization of Human Eggs after Separation of Motile Spermatozoa by Density Gradient Centrifugation. Hyne, R.V., Stojanoff, A., Clarke, G.N., Lopata, A. Johnston, W.I.H., Fertility and Sterility, 45:93-96, 1986

The Immunoglobulin Class of Antispermatozoal Antibodies in Serum, Clarke, G.N., Stojanoff, A., Cauchi, M.N., Johnston, W.I.H, Am. J.Reprod. Immunol. And Microbiol. 7:143-147, 1985

Detection of Sperm-Bound Antibodies, Australian Society of Immunology, Clarke, G.N., Stojanoff, A., Cauchi, M.N., Canberra, 1981, pp.73

Consent Agenda Item I

Joe Lombardo
Governor

Richard Whitley, MS
Director

DEPARTMENT OF HEALTH AND HUMAN SERVICES

DIVISION OF PUBLIC AND BEHAVIORAL HEALTH

Helping people. It's who we are and what we do.

Lisa Sherych
Administrator

Ihsan Azzam, Ph.D., M.D.
Chief Medical Officer

MEMORANDUM

DATE: February 16, 2023
TO: Jon Pennell, DMV, Acting Chairman
FROM: Lisa Sherych, Secretary, State Board of Health

RE: Request to Reappoint Iain Buxton, Ph.D., to the Medical Laboratory Advisory Committee

This is a request from Bureau of Health Care Quality and Compliance (HCQC) staff to reappoint **Iain Buxton, Ph.D.**, to the Medical Laboratory Advisory Committee (MLAC) to serve a three-year term.

STAFF REVIEW

In accordance with Nevada Revised Statutes NRS 652.170(1), it is the responsibility of the State Board of Health to appoint the seven members of the Medical Laboratory Advisory Committee. Under NRS 652.170(4), the MLAC is composed of: (a) Two pathologists, certified in clinical pathology by the American Board of Pathology; (b) Two medical technologists; (c) One bioanalyst who is a laboratory director; (d) One qualified biochemist from the Nevada System of Higher Education; and (e) One licensed physician actively engaged in the practice of clinical medicine in the State. Under NRS 652.170(2)-(3), members are allowed to serve no more than two (2) consecutive three-year terms.

HCQC administers the MLAC, which includes overseeing the process of ensuring the MLAC seats are filled. Iain Buxton, Ph.D., served his first term on the MLAC from 12/06/2019 – 12/06/2022. HCQC staff confirmed his interest by email in serving a second term.

STAFF RECOMMENDATION

HCQC staff request the Board of Health reappoint Iain Buxton, Ph.D., serving as a bioanalyst who a laboratory director (NRS 652.170(4)(c)) to a second three-year term to run 12/06/2022 - 12/06/2025. His resume is included for your reference.

PRESENTER

Bradley Waples, B.S. MT(ASCP)
Acting Manager | Medical Laboratory Services
Division of Public and Behavioral Health

Iain L. O. Buxton

Regents Professor 2011; Foundation Professor 2013

Curriculum Vitae

PERSONAL Born in Buckinghamshire, England, 1950 (http://www.royalbucks.co.uk/)
Immigrated to the United States on the Queen Mary, 1961
U.S. citizen, 1975
Married, 1981: one child; *Noah David*, born 1984

ADDRESS Department of Pharmacology, University of Nevada, Reno School of Medicine
1664 N. Virginia Street, Reno, Nevada 89557
Office Phone: (775) 784-4800
FAX: (775) 784-1620; eMail; ibuxton@med.unr.edu

EDUCATION

Bachelor of Arts, (BA) University of California, San Diego
1973, Major: Cell and Molecular Biology

PhD Graduate Studies, Biochemistry Graduate Program
1975 Major: Enzymology, (PhD pgm.) North Carolina State, Raleigh, NC

Doctor of Pharmacy, (PHMD), University of the Pacific,
1978, Major: Pharmaceutical Sciences

Licenses: US DEA RB0387402 (inactive); Nevada Board of Pharmacy, CS18785, Controlled Substance, (inactive);

DIVERSITY STATEMENT

I am inclusive and celebrate multiple approaches and points of view. It is my experience that diversity drives change and innovation. A successful education and research environment requires that everyone feels included and valued, everyone. Our differences make us unique. A safe and happy place to work and learn follows from leadership that fosters difference.

EXPERIENCE

7/2015-Present	**President and CEO, ExCyte Therapeutics**, a Nevada Corporation developing basic research discoveries into new treatments to help patients.
5/2010-Present	**President**, Western Pharmacology Society, Registered non-profit 501(c)3.
4/2013-Present	**Foundation Professor,** University of Nevada, Reno
7/2014-1/31/18	**President**, Campus Pharmacy Corporation, University of Nevada School of Medicine
2/2011-12/2017	**Chair, Department of Pharmacology,** University of Nevada Reno, School of Medicine
11/2003-6/2008	**Dean** (Planning and Implementation) University of Nevada School of Pharmacy
5/2010-7/2012	**Director**, University of Nevada, Reno, Center for Advanced Studies
7/1995	**Professor**, Department of Pharmacology, University of Nevada School of Medicine, Reno, NV.
12/2001	Professor, Department of Obstetrics & Gynecology, University of Nevada, Southern Campus, Las Vegas, NV.
1/2005-7/2006	President, Pharmaceutical Education and Research Foundation of Nevada (A Nevada Non-Profit Corporation; 501 c3)
6/2003-2009	Adjunct Professor, Nevada Cancer Institute, 10000 W. Charleston Blvd. Suite 260, Las Vegas, NV
7/1995-6/2014	Director, School of Medicine Performance Compensation Plan University of Nevada School of Medicine, Reno, NV

EXPERIENCE *(continued)*

9/2001-7/2003	Director, Biochemistry Graduate Program, University of Nevada, Reno, NV; Interdisciplinary Program; Colleges of Agriculture, Arts & Science and Medicine
7/1997-6/2002	Faculty Director, University of Nevada Flow Cytometry Laboratory University of Nevada School of Medicine, Reno, NV
1/1998-7/2001	Co-Chair, President's School of Pharmacy Task Force
7/1996-1/1998	Associate Dean for Research & Director, Office of Medical Research University of Nevada School of Medicine, Reno, NV
4/1993-6/30/96	Assistant Dean for Research & Director, Office of Medical Research University of Nevada School of Medicine, Reno, NV
4/1989-4/30/95	Director, Tissue, Cell and Tissue Culture Research Core, UNR Program Project in Colonic Motility
7/1989-6/30/95	Associate Professor (with tenure), Department of Pharmacology, University of Nevada School of Medicine, Reno, Nevada
4/1985-6/1989	Assistant Professor, Department of Pharmacology University of Nevada School of Medicine, Reno, Nevada
5/1984-4/1985	**Assistant** Research Pharmacologist, Department of Medicine, Division of Pharmacology, University of California, San Diego
5/1981-5/1984	Postdoctoral Fellow with Dr. L.L. Brunton, Department of Medicine, Divisions of Pharmacology & Cardiology, U.C. San Diego
7/1980-2/1981	Clinical Pharmacist, Veterans Administration Medical Center, San Diego, California *Supervisor*: Drug Information Section *Head*: Investigational Drug Studies Section
7/1979-6/1980	Clinical Fellow, Veterans Affairs Medical Center, San Diego, CA
7/1978-6/1979	Clinical Resident, Veterans Affairs Medical Center, San Diego, CA
9/1974-7/1975	Research Associate with Dr. H.L. Leffert, Cell Biology Laboratory, Salk Institute for Biological Studies, La Jolla, California
7/1973-8/1974	Research Associate (PhD Program) with Dr. R.A. Main, Biochemistry Dept. North Carolina State University, Raleigh, NC
7/1972-6/1973	Research Assistant with Dr. R. Holley, (*Nobel '68*), Cancer Biology Laboratory, Salk Institute for Biological Studies, La Jolla, CA

TEACHING EXPERIENCE

4/1985-Present	Faculty in Pharmacology, University of Nevada, School of Medicine
5/1981-5/1985	Laboratory instruction of UCSD Physiology/Pharmacology Program Medical and Graduate Students
9/1978-5/1981	Adjunct Clinical Instructor, University of the Pacific School of Pharmacy, Clinical Clerkship Program, San Diego Region
9/1978-5/1981	Adjunct Clinical Faculty, University of Southern California Clinical Internship Program, San Diego Region
9/1979-4/1980	Instructor of Pharmacology, National University, San Diego, CA.
8/1975-6/1977	Teaching Assistant, University of the Pacific, Stockton, California. Biochemistry Lab (Dr. F. Sayre). Cell & Tissue Culture (Dr. D. Pace)

State of Nevada Committee Assignments

Member, Medical Laboratory Advisory Committee (NRS 652.170)

Past BOARDS

President Elect and Member of the Board, American Heart Association, Nevada Chapter, Western States Affiliate

Member of the Board, *Integrated Clinical Services*, University of Nevada School of Medicine Clinical Practice Plan

Voting Member, Southern Regional Executive Committee (2010-2017)

Voting Member, Northern Regional Executive Committee (2010-2017)

Treasurer, Northern Regional Executive Committee (2017)

EDITORIAL EXPERIENCE

Editor-in-Chief, Proceedings of the Western Pharmacology Society [ISSN: 0083-8969]. Elected 2/1/2003; to 6/30/2012. Responsible for reviews, editing, and publication of the annual Proceedings of the Society.

Editorial Board Member; Annals of Pharmacotherapy [ISSN: 1060-0280]. 7/1/2003-7/1/2008. Handling manuscript reviews in the area of clinical pharmacology.

Editorial Board Member; Journal of Signal Transduction [ISSN: 2090-1739; eISSN: 2090-1747]. 9/27/2009-7/2017. Handling manuscripts in all areas of signaling in mammalian cells and tissues.

Associate Editor (2004-2008), Access Medicine; Goodman & Gilman for on-line pharmacology web-based text of the 11th Edition of Goodman & Gilman's Pharmacological Basis of Therapeutics, McGraw-Hill Publishers.

Author/Editor, "Goodman & Gilman's Manual of Pharmacology and Therapeutics" Student text book *in press*, McGraw-Hill, *Buxton, IL, Blumenthal, D and Brunton LL, Parker, K. Editors, pp. 1-1219*.

Author, Goodman & Gilman Textbook, "The Pharmacological Basis of Therapeutics". McGraw-Hill [ISBN: 0-07-1345469-7] *for the* 11th Edition. Chapter 1 : Pharmacodynamics and Pharmacokinetics: The Dynamics of Drug Absorption, Distribution, Action and Elimination *and* Appendix I: Principles of Prescription Order Writing and Patient Compliance.

For the 12th Edition: Buxton, I.L.O. and Leslie Z. Benet. *Chapter 2*, Pharmacokinetics. In: Goodman and Gilman's The Pharmacologic Basis of Therapeutics. 12th Edition, 2009, Ed: L.L.Brunton. McGraw-Hill, New York.

For the 12th Edition: Buxton, I.L.O. *Appendix 1*, Principles of Prescription Order Writing and Patient Compliance. In: Goodman and Gilman's The Pharmacologic Basis of Therapeutics., 2009, Ed: L.L.Brunton. McGraw-Hill, New York.

For the 13th Edition: Buxton, I.L.O. *Chapter 2*, Pharmacokinetics. and *Appendix 1*, Principles of Prescription Order Writing and Patient Compliance. In: Goodman and Gilman's The Pharmacologic Basis of Therapeutics., 2017, Ed: L.L.Brunton. McGraw-Hill, New York.

For the 14th Edition: Buxton, I.L.O. *Chapter 2*, Pharmacokinetics. In: Goodman and Gilman's The Pharmacologic Basis of Therapeutics., 2022, Ed: L.L.Brunton. McGraw-Hill, New York. ISBN 978-1-264-25807-9

PUBLIC SEREVICE INTERVIEWS

2016 Northern Nevada Innovator Healthcare Hero

Smoke Free Truckee Meadows & Science

MAJOR ACADEMIC PROJECTS

Planning Dean, University of Nevada, School of Pharmacy. Lead role in planning for curriculum, staffing, budget, recruitment, and governance. Proposal to include UNR and UNLV as equal partners in a statewide program granting the PharmD degree. Presented to and approved by the Regents of the NSHE August 2000, and again in 2004. The school remains unfunded and would require future legislative action.

President, University of Nevada Campus Pharmacy Services. Supervision of State-wide pharmacy business and clinical operations for the School of Medicine.

FORMAL TEACHING EXPERIENCE

Medical Pharmacology (Block Curriculum): Core basic science course in the MD curriculum taken in the spring semester of the sophomore year. Seventy-two students per year are taught in both the lecture and problem-solving small group format in the blocks in both years one and two that total one-hundred-fifty hours of instruction. Dr. Buxton was the content coordinator and taught in several sections of the course; Basic Principles, Pharmacokinetics, Autacoids and Eicosanoid Pharmacology and NSAID Pharmacology, Toxicology, Drug side effects. Dr. Buxton also provides therapeutic correlation of basic science in pharmacology for Diabetes, Rheumatoid Arthritis, Gout, Hypertension and Drugs in the Elderly. Dr. Buxton's student evaluations from the period range from 4.3 to 4.5 on a 1-5 scale.

Molecular Pharmacology (PHAR 710) Course Coordinator from inception till 2013: Fall semester, three units. Course details the development of our current understanding of receptor signal transduction in mammalian systems. Designed for graduate students earning the PhD and interested in careers in biomedical research and development in academia or industry. The course focuses on the molecular biochemistry of receptor structure; mass action considerations governing ligand-receptor binding interactions; molecular pharmacology of transduction of the receptor signal and specific considerations of receptors as pharmaceutical targets.

Reproductive Pharmacology (PHAR 770): Spring semester, three units/semester; graduate student lectures and discussion in placental organization and function, parturition, and problems of Pregnancy.

Molecular Cell Biology (CMB 710): Spring semester, four units. Advanced studies of the structure and function of cells provided for PhD students in Cell & Molecular Biology, Cell & Molecular Pharmacology and Physiology, and Biochemistry Graduate Programs. Dr. Buxton typically contributes lectures in Receptor Signal Transduction during eight hours of lecture.

Cancer Biology (Micro 787): Fall semester, three units. Contributing lectures upon request in the area of metastasis and angiogenesis in the invasion and progression of breast and other human cancers.

Experimental Biochemistry II (BCH 702): Fall, Spring and Summer semesters, three units/semester. Graduate student laboratory rotation in preparation of dissertation research for the PhD degree. Dr. Buxton is both mentor and instructor of record providing students with research experience and advising students on the selection of rotation experiences.

Senior Thesis (BCH 407-408): Fall/Spring (3+3 units). Laboratory research project required of undergraduate biochemistry majors (capstone course). Students participate in current research projects and prepare abstracts and research papers of their work as appropriate.

Cellular and Molecular Pharmacology (PHAR 799): Fall, Spring and Summer semesters, eight units/semester; one student in 2019. Teaching of PhD candidates in the laboratory.

Dissertation (BCH 799; CMB 799): Fall, Spring and Summer semesters, eight units/semester. Teaching of PhD students in the laboratory.

PAST COURSES

Introduction to Human Pharmacology (PHAR 400/600): Spring semester, three units. Undergraduate elective for BS students in the sciences taught by Dr. Buxton (47 hours; selected years). The Introduction to Human Pharmacology course addresses the basic scientific principles that govern the disposition of drugs in the body, the fundamental principles that determine the action of drugs on specific cellular and non-cellular targets and details the mechanism of action(s) and therapeutic usefulness of specific agents associated with particular organ systems or diseases. Though based on the lecture format, self-directed learning and group discussions are employed to permit the most effective and enjoyable format for learning. The course benefitted students interested in the health professions such as pharmacy, medicine or nursing as well as graduate study in the areas of pharmacology and physiology.

OB/Gyn Residency: Basic Science Correlations: Year-round required course. Dr. Buxton served as consultant to residents on the basic science aspects of required reading and preparation of resident presentations.

RESEARCH ACTIVITIES

Regulation of Contraction Associated Targets in Myometrium by S-Nitrosation

Discovery of the molecular mechanisms subserving human uterine quiescence during pregnancy and their dysregulation in spontaneous preterm labor is the objective of my research. We are testing the hypothesis that failure of preterm human myometrium to relax to nitric oxide (NO) is the result of dysregulated S-nitrosation of specific smooth muscle contractile proteins.

Our long-term goal is to find new effective tocolytics to treat women who enter labor too soon. Preterm labor leads to preterm delivery, a global problem accounting for 75% of fetal morbidity and mortality. No drugs reliably prevent labor in patients who enter labor preterm, thereby allowing their pregnancies to go to term. Therapeutic approaches to manage spontaneous preterm labor (SPTL) are employed without clear evidence of benefit for acute or maintenance tocolysis.

NO-mediated relaxation of myometrium is cGMP-independent. Preterm myometrium fails to relax to NO. Discovering the mechanism of action of S-nitrosated contractile proteins can suggest new therapeutic targets to manage SPTL. We propose that gestational quiescence until term results from regulated post-translational S-nitrosation of myosin light chain kinase (MLCK), the regulatory light chain (MYL9) and profilin-1 (PFN1). Addition of NO relaxes term, but not preterm laboring tissues as a result of S-nitrosation differences that alter the function of these CAPs in SPTL.

We have also proposed that in women, uterine quiescence during gestation until term is the result of regulated S-nitrosation of connexin 43 (Cx43) following endogenous, regional production of S-nitrosoglutathione (GSNO). GSNO relaxes term, but not preterm laboring tissues as a direct result of decreased Cx43 S-nitrosation due to increased GSNO reductase activity that results in altered connexin hemichannel activity.

Discovering the effect of regulated S-nitrosations on the mechanism of contractile protein action in term tissues, term tissues from patients in labor and in SPTL (with controls for gestational timing, tocolytic and antenatal steroid use, infection, and gestational length) will establish whether or not NO is an endogenous relaxation signal. Comparison of this S-NO fingerprint with that measured following relaxation of the tissue by NO addition in each pregnancy state is novel because SPTL is not simply early labor, will likely be influenced by infection and/or gestational length and because NO-induced relaxation of spontaneous and oxytocin-induced contractions of preterm myometrium is blunted. S-nitrosation differences between labor and SPTL point to altered quiescence mechanisms. Completion of this research will suggest therapeutic strategies for the treatment of SPTL such as the S-nitrosoglutathione reductase that regulates S-nitroso protein levels and is known to provide therapeutic benefit in asthma and for which an inhibitor is in development.

Stretch-Activated 2-pore Potassium Channels in Preterm Labor. In 2005 our lab was the first to discover expression of two stretch-activated potassium channels, TRAAK and TREK-1 in human myometrium and demonstrated that the TREK-1 channel is gestationally regulated. We were funded for this work by the *March of Dimes* and the *Bill and Melinda Gates Foundation* (the first gates Research Grant ever awarded at UNR). The objective of this research is to contribute to an understanding of the probable cause(s) of preterm labor in some women that may possess dysfunctional TREK-1 channels. Preterm birth remains a significant health issue in industrialized nations accounting for 12.5% of all live births in the United States and 80% of all perinatal complications and death. The incidence of preterm birth is unacceptably high. Tocolytic agents do not work. Prematurity costs over 30 billion annually and causes unacceptable morbidity and mortality. We must better understand the physiological mechanisms of pregnancy in women if we are to discover new approaches to the treatment of preterm labor.

The stretch-activated channels make up a unique subset of K+ channels that are mechano-sensitive and belong to a family of channels characterized by four transmembrane segments and two pore (2P) domain regions. TREK-1 (TWIK-related K+ channel), and TRAAK (TWIK-related arachidonic acid-stimulated K+ channel) channels are activated by free fatty acids, nitric oxide and increased membrane tension, each of which occur with pregnancy. These channels play an essential role in setting the resting membrane potential of the muscle cell. Thus, the possibility that TREK-1 is involved in the maintenance of relaxation of the human uterine smooth muscle prior to the onset of labor is of interest and we have discovered genetic variants of the channel in women that deliver preterm. These gene variants encode channels that are non-functional and dimerized with full-length TREK-1 leading to blockade of the TREK-1 current.

We hypothesize that SAK channels are gestationally regulated and maintain uterine quiescence prior to the onset of labor. Thus, activation of these channels by stretch, nitric oxide and/or arachidonic acid or its metabolites during pregnancy maintains hyperpolarization of the uterine smooth muscle helping to sustain relaxation and thereby prevent organized contractions. In women who commence labor too soon with the absence of premature rupture of membranes or intrauterine infection, there is a failure of TREK-1 based on the expression of variant channels that are non-functional, dysregulated or uncoupled and thus, pro-contractile forces cannot be overcome.

Origins of Uterine Dysfunction. While studying the functional effect of cholesterol withdrawal from uterine smooth muscle we discovered that the uterine muscle is activated by this treatment while other smooth muscle is depressed. Cholesterol overloading resulted in depression of myometrium. This result suggested the possibility that dysfunctional labors that occur in obese women may be the result of hypercholesterolemia. Labor progression is delayed in obese women and associated with complications and use of oxytocin (OT). We treated guinea pig myometrium to remove cholesterol expecting suppression of spontaneous activity and uncoupling of agonist specific relaxation as has been demonstrated in other muscles. Treatment of myometrium with 15 mM β-MeCD however led to enhancement of spontaneous activity that was further increased following a second β-MeCD treatment. This result was unexpected. Our findings suggest that cholesterol selectively uncouples relaxation signaling. We propose that suppression of myometrial activity by hypercholesterolemia may be the mechanism underlying uterine dysfunction in obese women.

Regulation of Breast Cancer-mediated Angiogenesis. This project has been funded by the *Clayton Foundation for Research* and the *Congressionally Directed Medical Research, Breast Cancer Program, and the Women's Health Research Grant Program.* The goal of our research is to delineate the role of extracellular Nucleotide Diphosphate Kinase (NDPK/NM23) and its regulation of nucleotide levels in human breast cancer angiogenesis. Human breast cancer cells secrete exosomes, minute membrane encapsulated vesicles that contain a factor that supports the growth, differentiation, and permeability of endothelial cells *in vitro* consistent with a pro-angiogenic potential that subserves breast cancer metastasis. Using LC-MS/MS proteomic methods, we discovered that human breast cancer cell exosomes contain NM23. We have identified a pharmacophore for the development of inhibitors of

this enzyme factor (NDPK) and find these compounds to be anti-angiogenic. Learning how exosomal NDPK and its regulation of extracellular nucleotides, blocked by catechin gallates, can induce breast cancer angiogenesis will reveal new therapeutic targets in the treatment of breast cancer and its lethal metastatic spread. Extracellular purine nucleotides have recently emerged as a novel class of proliferative agents with a putative role in cancer and angiogenesis. Our data demonstrate that P2Y receptor activation promotes a significant pro-angiogenic response by transactivating the VEGF receptor. Coupled with our discovery of the generation and action of nucleotides in the blood stream, *The Nucleotide Axis Hypothesis*, progress on the aims described here may help explain aspects of cancer metastasis heretofore unrecognized. Progress on this work has appeared in the *British Journal of Cancer, Cancer Letters, Cancers,* and a patent has been issued.

In collaboration with C Iosef, we discovered that the methyl transferase EZH2, the transcription factor NFκB and the long non-coding RNA, NKILA are linked functionally, and this led us to hypothesize that their interaction could impact patient responses to EZH2 inhibitors suggesting the development of novel therapeutics for NFκB-mediated metastasis. Our preliminary results suggest the incorporation of glycemic regulation to combat the harmful effects on noncancerous breast epithelial cells following delivery of these adjuvants. The findings from the study will be significant because they will lead to improved treatment for breast cancer patients that reduces adverse side effects while maximizing the efficiency of EZH2 inhibitors in patients with high BMI (>30) and type-2 diabetes (T2D).

EXPERT WITNESS ACTIVITIES

Dr. Buxton is an experienced expert in the field of medical pharmacology and has served as an expert in cases ranging from wrongful death to testamentary capacity, capital murder, and medical malpractice. Dr. Buxton has expertise in both the scientific and regulatory aspects of pharmaceutical and medical practice including pharmaceutical compounding, active ingredient solubility and storage; evidence-based medical practice, actions of drugs in the human body, their therapeutic, unwanted, adverse and toxic effects and outcomes, the pharmacogenomic basis of adverse drug reactions and standard of care in medicine and pharmacy.

Experience:

In 2018-19, Dr. Buxton was retained by plaintiff's attorney to determine the pharmacologic basis of cardiac damage resulting in inappropriate sinus tachycardia from emergency room misadventures to manage an allergic reaction to food.

In 2017, Dr. Buxton was retained to offer testimony to the California State Board of Appeals in a criminal matter involving wrongful death and violence caused by prescription medication.

In 2013 and 2014, Dr. Buxton provided expert witness services in litigation in Nevada involving pharmacy training, staffing, compensation, and disciplinary practices that contribute to pharmacy errors that harm patients.

In 2012 and 2013, Dr. Buxton provided expert witness services for the defense looking to avoid the death penalty in a double homicide case involving the use by the defendant of synthetic cannabinoids.

In 2012, Dr. Buxton provided expert witness services to defendant's attorney in a medication adverse reaction case involving sedative hypnotics.

In 2011-2012, Dr. Buxton provided expert witness services to defendant's attorney involving the dispensing of an adulterated drug product.

In 2009-2010, Dr. Buxton provided expert witness in a wrongful death case. The case was filed in Second District Court, State of Nevada. Buxton was retained by plaintiffs' attorney to consult on the proximate cause of death and the standard of medical and pharmacy practice.

In 2008, Dr. Buxton provided expert opinion on behalf of the defendant in a matter filed in the District Court, Clark County, Nevada involving a pharmacy services provider.

In 2007, Dr. Buxton provided expert opinion in a wrongful death matter filed in the Circuit Court of the 11th District in and for Miami-Dade County, Florida. Dr. Buxton was retained on behalf of the defendant a health care provider and its physicians.

In 2006, Dr. Buxton was retained to examine prescription records and evaluate the potential that a driver with multiple claims for damages from automobile accidents was chronically impaired.

In 2005, Dr. Buxton rendered an opinion on behalf of the plaintiff in a medical malpractice case involving prescription medications.

UNIVERSITY FUNDRAISER

Planning and Development Grant for the University of Nevada Cell Cytometry Center
Barbara Geanoli Foundation, $380,000, 1997-1998.

Capital Campaign, Pennington Medical Education Building
Redfield Foundation, $500,000, 2001-2002.

University of Nevada School of Pharmacy
Campaign: $275,000 (pledges and gifts) 1998-2004

University of Nevada, Reno. Proteomics Center (*assisted*)

Equipment: $1,250,000, 2014

Research Gift, Department of Pharmacology 2016

Equipment: $200,000

CURRENT FUNDING (Principal Investigator/Co-investigator)

Awarded Grants

- Regulation of CAP Protein S-Nitrosation in Preterm Labor. NIH R01 HD091114-01A1. PI Buxton 10/2018-09/2023; $1,968,000 total costs.
- MMP9 Modulation of Uterine Contraction and Birth Timing. NIH R01HD100624 (PI Burkin, CoI Buxton) 07/2020-06/2025 $1,500,000 Total costs
- Post-translational Modification of Cx43 Regulates Myometrial Quiescence. NIH R21 HD108728-A1 PI Buxton 2/2023-1/2025; $275,000 Direct costs.

Pending Grants

- Stretch Activated Relaxation Signaling in the Human Uterus. NIH INBRE P20 GM103440 Supplement 4/2023 – 3/2024. $200,000 Direct costs.
- Stretch-Activated Signaling in Human Myometrium. NIH R01 HD113521-01. PI Buxton 12/2023-11/2028; $2,400,000 Direct costs.
- Nevada Center for Reproductive Sciences. NIH P20 GM152332-01 COBRE Phase 1 (PI, Buxton, MPI, Burkin) 12/2022-11/2028 $7,800,000 Direct cost.

Recently Completed Grants

- Exosomal NM23 in Breast Cancer Metastasis UNSOM Women's health Grant 7/01/2015-6/30/2017; $240,000 direct
- Super-Resolution Microscopy: Leica DMi8 with SR GSD 3D System UNSOM Women's Health Research Program 7/01/2015-6/30/2016; $420,000
- Cell Biology of Signaling Across Membranes NIH 8P20GM103554-02 (Von Bartheld PI/Buxton Mentor), 4/2012 – 3/2017; $5,000,000

HONORS AND AWARDS

- Nominated 2020: Sternfels Prize
- Health Care Heroes Innovator Award 2016 Nevada Business Magazine
- University of Nevada Foundation Professor 2013
- Regents Researcher Award, 2011. Statewide Award, NSHE
- Vada Trimble Outstanding Graduate Mentor Award, 2011
- E.W. Richardson Excellence in Teaching Award, School of Medicine, *Nom*. 2010
- UNR Outstanding Researcher of the Year Award 2008
- E.W. Richardson Excellence in Teaching Award, *Nom*. 2002, 2008.
- Regents Graduate Advisement Award: UNR, *Nom* 2002
- Fellow, AHA Council on Basic Cardiovascular Sciences, 2001
- UNR Researcher of the Year, *Nom*. 1997.
- "Heart of Gold Award" AHA, Las Vegas 1995
- NIH New Investigator, 1984-1987
- NIH Postdoctoral Trainee 1981-1984
- Rho Chi Research Award, UOP, 1977
- Dami Foundation Award, UOP, 1976

PROFESSIONAL ASSOCIATIONS

- American College of Clinical Pharmacy
- Am. Assoc. of Colleges of Pharmacy
- American Society for Pharmacology & Experimental Therapeutics
- American Society for Biochemistry & Molecular Biology
- American Physiological Society
- Human Proteome Society (HUPO)
- Society Delegate: United States Pharmacopeal Convention, 1985-2020
- Alliance for Cellular Signaling
- American Heart Association
- Sigma Xi Research Society
- Society for Gynecological Investigation
- New York Academy of Sciences
- Am. Assoc. for the Advancement of Science
- International Society for Analytical Cytology 1988-1995
- Am. Assoc. Medical Colleges: Ed. Affairs

PROFESSIONAL POSITIONS

- AMSPC (Pharmacology Chairs Group)
- Member of the Board, UNSOM *Integrated Clinical Services Inc*. 2011-2017
- Member, *Northern Regional Executive Committee*, School of Medicine Practice
- Member, *Southern Regional Executive Committee*, School of Medicine Practice
- Academic Health Center Task Force, UNSOM-UMC 2010
- Director, School of Medicine Performance Compensation Plan 1995-2014
- Vice Chair, Research Committee of the AHA (MWPRC 1994)
- Chairman, AHA National Affiliate Study Section A (1995-96 Vascular Wall Biology)
- President Elect, American Heart Association, Nevada Affiliate 1992-1993
- Chair, Research Allocations Committee, AHA, Nevada 1990-92
- President, American Heart Association, Nevada Affiliate 1993-1995
- AM. Association for Cancer Research
- Member, Board of Directors, AHA, Nevada Affiliate 1990-1997.
- Member, Executive Committee, AHA Nevada Affiliate, 1992-1997.
- Member, Research Allocations Committee, AHA, Nevada 1989-96
- Member; ACCP Research Affairs Committee 1987-1988; 1997; Credentials Committee 1990-1993.
- Councilor, Western Pharmacology Society, 2000-2002
- President, Western Pharmacology Society, 2002-2003
- Editor-in-Chief & Treasurer, Western Pharmacology Society, 2003-Present
- Member, Science Advisory Board, Bioinformatics, LLC. 2001-Present
- Member, The Gerson Lehman Group Council of Healthcare Advisors, 2002

ADVANCED TRAINING

- HPLC Methods & Applications, Hewlett Packard, Pleasanton, California 1989.
- Operator Course, Coulter EPICS Elite ESP cytometer/cell sorter, FL, 1998.
- Course in Apoptosis, FASEB Annual Meeting, San Francisco, CA, 1998.
- Course in Flow Cytometry Methods, Bowdoin, Maine, 1998.
- Ideas for Professors: Effective College Teaching, Reno, 1999.
- Course in Functional Genomics, FASEB Annual Meeting 2000

CURRENT ACADEMIC COMMITTEES

- Chair, Radiation Safety Committee, University of Nevada, Reno
- Member, Laboratory Safety Committee, University of Nevada, Reno
- Member, Medical Laboratory Advisory Committee (NRS 652.170), State of Nevada.
- Member UNR Freezer Farm Management Group.

PAST ACADEMIC COMMITEES

- University Academic Standards Committee (1985-1987)
- University Human Subjects Committee (1986-1992)
- School of Medicine Search Committee: Chairman of Surgery (1987-1988)
- School of Medicine Search Committee: Chairman of OB/GYN (1989-1991)
- School of Medicine Library Committee (1989-1992)
- University of Nevada, Research Advisory Board (1989-1991)
- University of Nevada Search Committee: Radiation Health Physicist (1989-1990)
- Department of Pharmacology Search Committee: Assistant Professor (1989)

PAST ACADEMIC COMMITTEES *(continued)*

- Chairman, Generalist Initiative, Basic Science Task Force (1991-1992)
- Chairman, CMPP Graduate Student Recruitment and Admissions (1990-1995)
- Member, Personnel Committee of the School of Medicine (1992-1994)
- University of Nevada Search Committee: Exercise Physiologist (1991-1992)
- Chairman, Personnel Committee of the School of Medicine (1992-1994)
- Chairman, Basic Science Chairs Committee, UN, School of Medicine (93-97)
- Chair, Medical Student Research Comm., School of Medicine (1993-97) Chairman, School of Medicine Research Committee (1995-1997)
- Member, Science and Technology Day Committee, UNR (1993-1996)
- UCCSN, Search Committee: Director of Environmental Health and Safety (1994)
- University of Nevada, Search Committee: Professor of Biochemistry (1994)
- School of Medicine, Faculty Steering Committee (1994-1996)
- Member, University LCME Accreditation Self-Study Committee: Finance (1996-97)
- Member, CMPP Graduate Student Recruitment and Admissions Committee (1996-1998)
- Member, School of Medicine Search Committee; Senior Associate Dean (1996-1997)
- Member, School of Medicine Computers in Medical Education Working Group
- Co-Chair, President's Task Force, School of Pharmacy (1998-2004)
- School of Medicine Radiation Hazards Committee (1987-1998)
- Member, Search Committee, Research Director, Sanford Center for Aging (1998)
- Member, Search Committee, Ass. Prof., Speech Pathology & Audiology (1998)
- Member, UNSOM Education Building Fundraising Committee; Education Building (1997-2002)
- Member, Search Committee, Assistant Professor of Biochemistry, (1999-2000)
- Advisory Board Member, University of Nevada, Reno Excellence in Teaching Program (2000-2003)
- Member, University of Nevada Medical Admissions Committee (2001-2005)
- Member, Planning Committee; Inter-disciplinary Graduate Program. Molecular Biosciences and Biotechnology (2002-2003)
- Chairman, Personnel Committee of the School of Medicine (2004-2005)
- Member, Personnel Committee of the University of Nevada (2004)
- Member, UNSOM Faculty Senate, Faculty Development Subcommittee (2004)
- Member, School of Medicine Executive Committee (2005-2015).Member, Health Science Center Planning Committee (2006)
- Member, Scholarship Committee, Sanford Center for Aging. (2002-2009)
- Member, Nevada System of Higher Education Radiation Safety Committee. 2000-2015.
- Chair, Nevada System of Higher Education, Radiation Safety Committee. 2015-present
- School of Medicine Course Coordinators Committee: Year 1-2, 2008-present.
- Selection Committee; UNSOM; Chairman, Obstetrics and Gynecology. 2010.
- Selection Committee; UNSOM; Vice President for Health Sciences and Dean of the School of Medicine. 2010.

PAST ACADEMIC COMMITTEES *(continued)*

- Curricular Reform Task Force UNSOM; 2010-2011.
- Search Committee; UNSOM; Director, Marketing and Communications, 2012
- Search Committee; UNSOM; Director, Faculty Compensation/Productivity, 2012
- Member, LCME Reaccreditation Steering Committee, 2016-2017
- Co-Chair, Educational Resources Committee, LCME Reaccreditation 2016-2017

PEER REVIEW

Grant Reviewer

- Ad Hoc Reviewer, NIH Study Section: Office of the Director. ZRG1 BST-J(70)R 2022.
- French National Research Agency. Grant Reviewer for Perinatology Proposals. 2020.
- Action Medical Research for Children. "Born too Soon: Flagship Campaign, United Kingdom Research Project Reviewer 2019.
- Member, NIH Study Section Reviewer, ZRG1 EMNR-C (02). 2018.
- FDA Review Panel advisory Preparatory Meeting, Clarus Therapeutics. 12/2017.
- NIH Special Emphasis Panel. Obstetric-Fetal Pharmacology Research Centers (OPRC) ZHD1 DSR-A 50 1, April 2015-2016.
- Medical Research Grant Reviewer for the State of Arizona. 2014.
- NIH Study Section Reviewer 2010/08 ZRG1 EMNR-C (55) 06/29/2010; PN 2011-2012.
- Proposal Referee for The Wellcome Trust, London, England 2010-2012.
- NIH Study Section Reviewer, ZRG1 EMNR-C Challenge Grants Panel 15, 2009.
- Ad Hoc Reviewer, UK Action Medical Research, 2008.
- Proposal Referee for The Wellcome Trust, London, England 2002-2007; 2019-2020.
- Community Grants. Susan G. Komen for the Cure. 2008.
- NIH Study Section Member; Pregnancy and Perinatology. Fall 2008.
- Reviewer, Excellence in Diversity Graduate Fellowships, UNR, 2002-3.
- Member, Collaborative Research Panel, CA Breast Cancer Program, 2000-2002.
- Ad Hoc Reviewer: VA Merit Awards, 2001.
- Hatch Research Grants: Biochemistry (1989-97, 2000-2004).
- Reviewer, US Army Breast Cancer Research, Cell Signaling Section, 1999.
- Reviewer; Cottrell New Investigator Awards, Research Corporation, 1998-99.
- Member, NIH Review Panel, RCMI Program DRR 1999.
- Chairman, National Affiliate Study Section A (1995 Vascular Wall Biology).
- Member, NIH Study Section, Cardiovascular Sciences, (1993-1995).
- Reviewer, Election of Fellows, Am. College of Clinical Pharmacy, 1992, 1993.
- Ad Hoc Reviewer, Genentech Fellowship in Pharmacotherapy, 1992, 1993.
- Ad Hoc Member, NIH Study Section (Biochemical Endocrinology, 1992).
- Research Committee of the American Heart Association (MWPRC 1988-1995).
- Ad Hoc Member, NIH Study Section (SSS - Fluorescence Techniques; 1989).

PEER REVIEW *(continued)*

Manuscript Reviewer (16 manuscripts reviewed in 2022)

- American Journal of Obstetrics and Gynecology (since 1994)
- Journal of Pharmacology & Experimental Therapeutics (since 1984)
- American Journal of Physiology (since 1985)
- Journal of Applied Physiology (since 1996)
- Journal of Physiology (London; since 1997)
- Journal of Cardiovascular Pharmacology (since 1985)
- Circulation (since 1992)
- Circulation Research (since 1998)
- Journal of Biological Chemistry (since 1988)
- Life Sciences (since 1986)
- Pharmacotherapy (since 1989)
- Pharmacological Reviews (since 1992)
- Nature-Laboratory Invest. (Since 2017)
- The Journal of Cell Biology (since 1992)
- Annals of Pharmacotherapy (since 1992); Editorial Board Member, Clinical Pharmacology (2003-2008)
- Clinical & Experimental Pharmacology and Physiology (since 1993)
- Regulatory Peptides (1996-1998)
- Molecular Pharmacology (since 1989)
- Experimental Aging Research (since 2000)
- Proceedings, Western Pharmacology Society Editor-in-Chief since 2003.
- The Medical Letter (since 2003)
- American Journal of Pharmaceutical Education (since 2006)
- Journal of Clinical Pathology (since 2010)
- Nature 2014; 2020
- British Journal of Medicine and Medical Research (since 2017)
- Reviewer, Pflügers Archiv - European Journal of Physiology 2018-2019
- Journal of Medicinal Chemistry, 2021-Pres.

Scientific Abstract Reviewer

- Society for Reproductive Investigation, Annual Meeting (1997-2016)
- American College of Clinical Pharmacy, Scientific Sessions (1983-88; 1994-96)
- American Heart Association National Annual Meeting & Scientific Sessions (1993-2000)
- Western Pharmacology Society, Annual Meeting & Scientific Sessions, 2003-2010

Program Reviewer

- Site Visit Reviewer, NIH Program Project in Cellular Fluorescence Techniques. *PI*: D. Lansing Taylor, Department of Biological Sciences, Carnegie Mellon University, Pittsburgh, PA; On-site review 1989
- FDA Preparation Review Panel Member, Nashville Tennessee, 2017.
- NIH Program Project in Endothelial Cell Gene Transplantation. *PI*: Fritz H. Bach, Depart. of Surgery, Harvard Medical School and Deaconess Hospital, Boston, MA; 1997
- American Heart Association New Hampshire Affiliate, Reaffilitation Site Visit 1994-1995
- NIH-NCRR Core Facility in Toxicology and Flow Cytometry; RCMI *Principal Investigator*: Alfred Nyanda, Department of Pharmacology Meharry Medical College, Nashville, On-Site Review, December 1999.
- March of Dimes. Research Grants 2019; Clinical Science. Panel Review Member. Online reviews 2019.

RESEARCH FUNDING HISTORY (funded as Principal Investigator or Co Investigator)

- Subcellular Compartmentation of Hormone Action in Heart. Training in Cardiovascular Pharmacology. NIH NRSA HL O7444, 4/81-6/84.
- Mechanisms of α_1-Adrenoceptors on Cardiac Myocytes. NIH R23 HL 32928, PI: Buxton 7/84-6/87, $105,000 *direct costs*.
- Development of a Cellular Model of Mammalian Ventricle. UCSD BRSG, Faculty Research Grant, PI: Buxton (6-510124) 1984 $2,272 *direct costs*.
- Mechanisms of α_1-Adrenoceptors on Cardiac Myocytes. NIH RO1 HL35416, PI: Buxton 7/87-6/91, $310,453 *direct costs*.
- Activation of Cardiomyocyte Phosphodiesterase. AHA Nevada Affiliate Grant-in-Aid, PI: Buxton 7/85-6/86, $15,895 *direct costs.*
- Compartmentation of Hormone Action in 3T3-L1 Adipocytes. UNR-RAB, Junior Faculty Award PI: Iain Buxton 7/86-6/87, $9,500 *direct costs*.
- Hormone Signal Transduction in Cardiac Myocytes. AHA Affiliate Grant-in-Aid, PI: Buxton 7/86-6/88, $32,533 *direct costs*.
- Regulation of Calcium Action in the Heart**.** Max Baer Heart Fund, PI: Buxton 5/87-9/87, $5,000 *direct costs*
- Gradient HPLC. NIH Small Instrumentation Grant. NIH S15 HL 39506, PI: Iain Buxton 7/87-6/88, $15,487 *direct costs*.
- Phillips CM10 Transmission Electron Microscope. NIH Shared Instrumentation Grant, NIH S10 RR 03453 Co-PI 10/86-9/87, $188,370 *direct costs*.
- Automated Fluorescence Analysis of Cells. NIH Shared Instrumentation Grant, NIH S10 RR 04160 Co-PI 10/87-9/88, $246,000 *direct costs*.
- Purinergic Mechanisms in Cardiac Blood Vessels. UNR-RAB Award, PI: Buxton 4/90-3/91, $5,000 *direct costs*.
- Receptor-Signal Transduction in the Vasculature in Diabetes. ADA National Research Program, PI: Buxton 7/88-6/90, $69,828 *direct costs*.
- Receptors for Adenyl Purines in Uterus. UNR-RAB Award, PI: Buxton 5/89-4/90, $5,000 *direct.*
- Radioactive Flow Detector for HPLC. NIH Small Instrumentation Grant NIH S15 HL 41739, PI: Buxton 7/88-6/89, $16,500 *direct costs*.
- Quantitative Fluorescence Detection System. NIH Shared Instrumentation Grant, NIH S10 RR 05876, PI: Buxton 12/89-11/91, $100,000 *direct costs*.
- Fluorescence Imaging Laboratory. Facilities Enhancement; UNR, VPAA, PI: Buxton 1/91-11/92, $16,000 *direct costs*.
- Real-Time Fluorescence Video Imaging of Calcium Distributions in Living Cells. Reno Cancer Center, PI: Buxton 10/91-9/93, $4,000 *direct costs*.
- Role of Adenyl Purines in Myometrial Function. NIH RO1 HD 26227 9/89 - 12/94, PI: Buxton $569,897 *direct costs*.
- Receptor-signal Transduction in Colonic Muscle. NIH PO1 DK 41315 (Project 4 PI: Buxton) 4/94-3/95, $116,000 *direct costs.*
- The Role of Ecto-ATP Generation in Breast Cancer Metastasis. PI: Buxton; Reno Cancer Foundation, 1994, $3,000 *direct*.
- Receptor-Signal Transduction in Colonic Muscle. NIH PO1 DK 41315 (Project 4 PI: Buxton), 4/89-3/94, $456,000 *direct costs*.
- Acquisition of a Quadrapole Mass Spectrometer. NSF DIR-9102839 Equipment Grant, Buxton: Principal User 20%, $304,322 *direct costs*.

RESEARCH FUNDING HISTORY (funded as PI or Co I continued)

- Cell and Tissue Culture Core B: Receptor-Signal Transduction in Colonic Muscle. NIH PO1 DK 41315, (Director Core B; I. Buxton) 4/89-3/95, $480,000 *direct costs*
- Bio-Rad MRC-600 Confocal Imaging System. NIH Shared Instrumentation Grant; NIH S10 RR 06507-01 Buxton: Principal User 20%, $135,000 *direct costs*.
- Digital Camera for Cell Motion Analysis. PI: Buxton Reno Cancer Foundation, 10/95-9/96, $3,400 *direct costs*.
- The Effect of Age on the Purinergic Axis of Cardiac Blood Vessels. PI: Buxton, Sanford Center for Aging, 11/95-10-96 $10,000 *direct costs*.
- Role of ATP in Vascular Neuroeffector Processes. NIH RO1 HL 38126, Dr. D. Westfall, PI; Buxton Co-Investigator, 10% effort, 4/92-4/97 $497,644 *direct costs*.
- Postjunctional Mechanisms in Airway Hyperreactivity. NIH RO1 HL 48183, Dr. Gerthoffer, PI; 10% effort, 2/92-1/97 $636,673 *direct costs*.
- Automated DNA Sequenator (ABI 310; $65,000.00). PI: Buxton; Gianoli Foundation, 1997.
- Fluorescence-Activated Cell Sorting (Coulter Epix; $380,000.00). PI: Buxton; Gianoli Foundation, 1997
- Molecular Basis of Nitric Oxide Action in Primate Myometrium. NIH R29 HD33430, Dr. M. Bradley, PI; Buxton Co-I, 5% effort, 4/96 - 3/98 $505,050 *total costs*.
- Purinergic Mechanisms in Cardiac Endothelial Cells. American Heart Association, National Grant-in-Aid Program 96006430; 1996-99; PI: Buxton $132,000 *total costs*.

Pre and In-flight Countermeasures to Sarcopenia. PI: Buxton, Nevada Space Grant Program; 9/02-8/03, $4,200 *direct costs.*

- Role of Ecto-ATP Generation in Breast Cancer Metastasis. Clayton Foundation for Research NV-03 1/95-12/06 $1,250,000 *total costs*; 05-06 $83,332 *total costs*.
- Functional Compartmentation of Nucleotide Receptors in Endothelial Cells. Robert Z. Hawkins Foundation 8/15/05 – 8/14/06; $22,500 *direct costs.*
- Roche Pharmaceuticals WPS Pgm. Support 2004-2006; $25,000.
- Purinergic Mechanisms in Coronary Blood Vessels. NIH RO1 HL56422-01 12/96-11/02 (*Percentile Ranking* 1.5) $1,249,694 *total costs*.
- Control of Rectoanal Motility. NIH 1R01 DK 054490. PI Keef; Buxton, 5% effort, 8/00–7/02 $850,000 *direct costs*.
- AHA Meeting Grant: WPS Annual Meeting 2/2/2003-2/6/2004, $2,000
- NV Biomedical Resources Infrastructure Network. NIH BRIN 2002-2003 Core Use Grants, $8,000 *direct costs.*
- Cloning and Expression of the Coronary P2y Receptor. Robert Z. Hawkins Foundation 8/15/01 – 7/31/04; $69,500 *direct costs.*
- Regulation of Smooth Muscle Myosin Phosphatase in Microgravity. NASA, $15,820 *direct costs*, 3/1/04-2/28/05.
- CSI-6000 Health Station Performance Study: AMI/ANSI Standards (SP-10): Computerized Screening Inc. $6,500, Buxton PI; 2007.
- 2007 Annual Meeting Program Support for Western Pharmacology Society: NIH Office of Rare Diseases $15,000.

RESEARCH FUNDING HISTORY (funded as PI or Co I continued)

- Stretch-Activated 2-Pore K^+-Channels, TREK-1 and TRAAK in Preterm Labor. March of Dimes, 3/07 – 3/10; PI: Buxton $301,386 *direct costs.*
- Effective Treatment to Prevent Preterm Delivery. Gates Grand Challenges. Round-6, Phase I, $100,000 5/1/11 – 3/31/13.
- Regulation of Myometrial Relaxation: Agonist-specific cGMP Action. NIH RO1 HD053028; 2007-2013; $1,300,000 Inc. ARRA Supplement; *direct costs.* PI: Buxton.
- Stretch-Activated Two-Pore Potassium Channel Variants in Preterm Labor. MOD 2010-2013) PI: Buxton, $394,226 *total cost*
- Post-Translational S-nitrosation of Therapeutic Targets in Pregnancy and Labor. NIH 1U54GM 104944-01. CTR Pilot $50,000 1/2014-12/2014.

RESEARCH FUNDING HISTORY *(Mentor/Sponsor)*

- Purinergic Receptor-mediated Angiogenesis in Breast Cancer. CDMRP BCRP Grant 10207692. PI: N. Yokdang, Mentor Buxton, $84,000 direct costs, 2009-11.
- The Human Myometrial Nitroproteome in Pregnancy and Labor. PhRMA Found. 2012-2014, $60,000 Craig Ulrich, Mentor Buxton.
- Precollege Science Education in Nevada. Howard Hughes Medical Institute, HHMI #72594-537601, 7/94-6/99; $200,000 direct costs.
- Washoe County Precollege Science Initiative. Washoe County School District. PI: Buxton 1996-1999. $54,000 direct costs.
- Cell and Molecular Cancer Research Training in Nevada. NIH T32 CA 09563 PI: D. Hudig. Buxton; Co-I. 12/97-11/03.
- Vascular Smooth Muscle in Microgravity. NASA EPSCoR Student Fellowship Grant. Erica Gipson, $8,000 direct costs.
- Pre-Doctoral Training Award, B. Oxhorn, Agonist-Specific ATP Release from Endothelial Cells. NIH F31 NR07379, 1998-2002, $95,000 direct costs.
- Pre-Doctoral Training Award, Robert Kaiser, Cloning and Characterization of a P2y4-like Uridine Receptor from Endothelial Cells. AHA Western States Affiliate, 2000-2002, $43,000 direct costs.
- Post-Doctoral Training Award, Michael Bradley, Adenosine A1 Receptors in Myometrium. F32HD07448-02, 1990-93, $80,000 direct costs.
- Post-Doctoral Training Award, S. Yang, ATP Release from Endothelial Cells. AHA-Nevada, 1990-92, $40,000 direct costs.
- Pre-Doctoral Training Award, Dennis Cheek, Purinergic Regulation in Cardiac Blood Vessels. NIH F31 NR06867, 93-96, $90,000 direct costs.
- Post-Doctoral Training Award, Dennis Cheek, Purine Metabolism by Cardiac Endothelial Cells. AHA-Nevada, 1994-95, $22,000 direct.
- Vascular Smooth Muscle in Microgravity. NASA EPSCoR Student Fellowship Grant. Erica Gipson 2002, $8,000 direct costs.
- Purinergic Regulation of Breast Cancer Metastasis. INBRE Undergraduate Fellows Program Whitney Law 2005; $5,000 direct.
- Stretch-Activated 2-pore Potassium Channels in Myometrium. INBRE Undergraduate Fellows Program. Eric Hansen 2006; $5,000 direct costs.
- TREK-1 Currents in Uterine Myocytes. INBRE Undergraduate Fellows Program. Mike Lee 2013; $5,000 direct costs.

RESEARCH FUNDING HISTORY (*Mentor/Sponsor*)

- Angiogenic Mechanisms; 3D Culture. INBRE Undergraduate Fellows Program. Katie Speirs 2011-13; $10,000 direct costs.
- Purinergic Receptor-Mediated Angiogenesis in Breast Cancer. CDMRP BCRP Grant 10207692. PI: N. Yokdang, 2010-2013; Mentor Buxton, $84,000 direct costs.
- EZH2 inhibition and regulators of NFkB and NKILA represent a novel breast cancer therapy. NIH-NCI Huntsman GMap grant 2018. Suzann Duan, Mentor Buxton.
- Proteomic Discovery in Human Myometrium**.** PhRMA Foundation Predoctoral Fellowship. 2010-2013 $75,000.
- Integrin Regulation of Stretch-Activated Myometrial Signaling During Pregnancy and Labor. NIH HD067342 7/2011-6/2016, PI Burkin, Mentor Buxton; $689,669 direct

UNDERGRADUATE TRAINING IN RESEARCH

- Dr. Buxton regularly takes medical students into the lab for research rotations in the summer between their freshman and sophomore years. Thirty-five students have been mentored from 1986 through the present.
- Dr. Buxton is a Research Mentor for the undergraduate major in Biochemistry. Students engage in a two-semester research experience and write an Undergraduate Thesis, and present their work in a public forum at the end of the academic year. Forty-eight students have been mentored since 1987 to the present.
- Dr. Buxton serves as a mentor for students majoring in Biochemistry, Biophysics and Molecular Biology from Whitman College, Wala Wala, Washington and Pharmacy students from Washington, Utah and Colorado.

GRADUATE PROGRAM AFFILIATIONS & TRAINING OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS:

- Founding Member, Cell and Molecular Pharmacology and Physiology, School of Medicine, University of Nevada, Reno
- Member and Director (*past*), Biochemistry Graduate Program, Colleges of Medicine, Science and Agriculture, University of Nevada, Reno
- Member, Cell and Molecular Biology Graduate Program, Colleges of Medicine, Science and Agriculture, University of Nevada, Reno

Graduate Training: ('➢' denotes Dr. Buxton as Major Advisor)

Name	*Program*	*Role*	*Date Received*
➢ Merton A. Smith	M.D./Ph.D. (Pharm.)	Advisor	Ph.D. (1989)
➢ Kurt O. Doggwiler	Pharmacology	Advisor	Ph.D. (1991)
Padraig Hart	Pharmacology/Physiology	Member	Ph.D. (1994)
Dawn Duval	Pharmacology/Physiology	Member	Ph.D. (1994)

	John Dover	Chemistry	Member	Ph.D. (1996)
➢	Karri Kuenzli	Pharmacology/Physiology	Advisor	Ph.D. (1996)
➢	Dennis Cheek	Pharmacology/Physiology	Advisor	Ph.D. (1996)
	Jeanette McHugh	Pharmacology/Physiology	Member	Ph.D. (1996)
	Shelly VonBerg	Speech Pathology/Audiology	Member	M.S. (1996)
	Christopher Porada	Pharmacology/Physiology	Member	Ph.D. (1998)
	Rich Eigenheer	Biochemistry	Member	Ph.D. (2001)
➢	Jasmine Vittori	Cell & Molecular Biology	Advisor	M.S. (W)
	Leah Skladany	Speech Pathology/Audiology	Member	Ph.D. (2001)
	Nicole Kiel	Speech Pathology/Audiology	Member	M.S. (2000)
	Jennifer Dreyer-Ladue	Speech Pathology/Audiology	Member	M.S. (2000)
	Brett Martin	Pharmacology/Physiology	Member	M.S. (1999)
	Lorraine Wolf	Speech Pathology/Audiology	Member	M.S. (1999)
	Peter Wolf (nr)	Speech Pathology/Audiology	Member	M.S. (1999)
	Rebecca E. Dendauw	Speech Pathology/Audiology	Member	M.S. (1999)
➢	Robert Kaiser	Biochemistry	Advisor	Ph.D. (2002)
➢	Brian Oxhorn	Pharmacology/Physiology	Advisor	Ph.D. (2002)
➢	Stephen Tichenor	Pharmacology/Physiology	Advisor	Ph.D. (*2004*)
➢	Jennifer N. Mazzone	Cell & Molecular Biology	Advisor	M.S. (2004)
	Kimberly Baker	Cell & Molecular Biology	Member	Ph.D. (2004)
➢	Sharif Rumjahn	Biochemistry	Advisor	Ph.D. (2008)
	Vincent Lombardi	Biochemistry	Member	Ph.D. (2006)
	Sonemany Salinthone	Cell & Molecular Biology	Member	Ph.D. (2006)
➢	Jennifer N. Tichenor	Cell & Molecular Biology	Advisor	Ph.D. (2008)
➢	Mark Gore	U. Colorado, PharmD Pgm.	Advisor	PHMD (2007)
	Sunny Xiang	Pharmacology/Physiology	Member	Ph.D. (2008)
	Tim O'Donnell	Pharmacology/Physiology	Member	Ph.D. (W)
	Sreenivasa Anugu	Chemistry	Member	Ph.D. (2009)
	Michael Mouradian	Biochemistry	Member	Ph.D. (2012)
➢	Nucharee Yokdang	Cell & Molecular Biology	Advisor	Ph.D. (2011)
➢	Craig Ulrich	Biochemistry	Advisor	Ph.D. (2012)
➢	Yi-Ying Wu	Biochemistry	Advisor	Ph.D. (2013)
➢	Scott Barnett	Pharmacology/Physiology	Advisor	Ph.D. (2017)
➢	Senny Wong	Biochemistry	Advisor	Ph.D. (2018)
➢	Suzanne Duan	Pharmacology/Physiology	Advisor	Ph.D. (2019)
➢	Hazik Asif	Pharmacology/Physiology	Advisor	Ph.D. (2022)
➢	Hazar Yonas	Pharmacology/Physiology	Advisor	Ph.D. (in process)

Training of Postdoctoral Fellows:

Name/Fellowship	*Doctoral Program/Year*	*Current Position*
➢ Lubo Zhang, Ph.D. 1990-1993	Pharmacology Iowa State University, Ames, 1989	Professor Loma Linda Univ. College of Medicine, CA
➢ Michael Bradley, Ph.D. 1990-1993	Physiology USC, Los Angeles, 1990	Professor of Biology, Newman Univ. Division of Science
➢ Shumei Yang, Ph.D. 1991-1993	Chemistry, Iowa State Univ. Ames, Iowa, 1991	Professor, Chemistry Cal State University, CA
➢ Elizabeth Berge, M.D. 1992-1993	Medicine, University of Nevada, Reno, 1992	Adj. Assoc. Professor OB/Gyn UNSOM, Las Vegas, NV
➢ James Barber, M.D. 1993-1994	Medicine, University of Nevada, Reno, 1993	Adj. Assoc. Professor OB/Gyn UNSOM, Las Vegas, NV
➢ Sandra Brave, Ph.D. 1993-1996	Pharmacology, King's College London, UK 1993	Senior Scientist Burroughs Welcome, UK
➢ W. Zaman, M.D., Ph.D. 1994-1996	Biochemistry Kyushu Univ. Japan 1993	Associate Member, Sanjay Gandhi Medical Institute, Lucknow, India
➢ S. Mathew, M.D., Ph.D. 1996-1997	Medicine, Biochemistry Univ. of Nevada Reno, 1996	Associate Professor Pediatrics UNSOM, Reno, NV
➢ D.J. Cheek, Ph.D. 1996-1997	Pharmacology University of Nevada, Reno, 1996	Professor TCU Nursing School Fort Worth, TX
➢ L. Jones, Pharm.D. 2004-2005	Purdue University, 2002 College of Pharmacy	Associate Professor, Loma Linda College of Pharmacy, California
➢ S. Rumjahn, Ph.D. 2008-2011	University of Nevada 2008 Pharmacological Sciences	Research Scientist, Charles River Labs, Reno, Nevada
➢ Nate Heyman, Ph.D. 2010-2012	University of Arizona, 2007 Physiology and Biophysics	Professor, California Baptist Univ., Riverside California
➢ Heather R. Burkin, Ph.D. 2010-2012	University of Illinois, 2003 Reproductive Biology	Assistant Professor, Univ. of Nevada, Dept. of Pharmacology
➢ Joseph Tellez, Ph.D. 2011-2012	University of Nevada, 2010 Biology	Postdoctoral Scholar, Univ. of California, Davis Cancer Center
➢ Chad Cowles, Ph.D. 2012-2016	University of Nevada, 2012 Biomedical Engineering	Postdoctoral Fellow, Univ. of Arizona, Dept. of Pharmacology
➢ Scott Barnett, Ph.D. 2012-16; 2019-	University of Nevada, 2017 CMPP, Pharmacology	Senior Fellow, Univ. of Nevada Buxton Lab
➢ Christian Salem, Ph.D. 2012-2016	University of Nevada, 2019 CMPP Pharmacology	Assistant Professor, Western Nevada College
➢ Jon Evasovic, Ph.D.	University of Nevada, 2019 CMPP Pharmacology	Current PostDoc 3/2023

PUBLICATIONS *(over 320 archival scientific publications*)

Original Research Articles

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∗ **Contributed as Principal Experimentalist**

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167. Copley-Salem, C, Ulrich, CC, Quilici, D, Schlauch, K, Burkin, HR, and Buxton, ILO. Stretch Induced Phosphoproteomic Signaling Networks in Pregnant Human Myometrial Cells. Reproductive Sciences, vol. 21, no. 3, pp. 138A

168. Chad L Cowles, Yi-Ying Wu, Cindy Valverde, Michael T Lee, Heather R Burkin, Iain LO Buxton [T-030] Characterization of Variants of Stretch-Activated 2-Pore Potassium Channel TREK-1. Poster Session: Basic Parturition, Prematurity, Thursday, March 27, 2014, 10:00 am.

169. Craig C Ulrich, David R Quilici, Karen Schlauch, Heather R Burkin, Iain LO Buxton[S-033] Proteomic Network Analysis of Human Uterine Smooth Muscle in Pregnancy, Labor, and Preterm Labor. Poster Session: Basic Parturition, Prematurity Saturday, March 29, 2014, 10:00 am.

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180. Suzann Duan, Senny Nordmeier, Iain L.O. Buxton. Exploring the metastatic potential of exosomal NM23 signaling using a triple negative breast cancer model in mice. AACR Abstracts, 4175, 2016.
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186. Craig Ulrich, Carolina Wandscheer, Christian Copley Salem, Veronica Arinze, Jenny Wong, Iain Buxton, Heather Burkin, 49th Annual Meeting, MMP2 and MMP9 Expression and Influence on Contraction in Pregnant Human Myometrium. Society for the Study of Reproduction, San Diego, CA, United States. (July 19, 2016).

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187. Craig Ulrich, Veronica Arinze, Christian Copley Salem, Iain Buxton, Heather Burkin. MMP2/9 Upregulation in Preterm Laboring Uterine Myometrium May Exacerbate Contractility. Biology of Reproduction a552 Abstracts 2017.

188. Craig Ulrich, Christian Copley Salem, David Quilici, Rebekah Woosley, Iain Buxton, Heather Burkin, Karen Schlauch. Isobaric TMT 10-plex labeled MultiNotch MS3 analysis of biological and technical variance in human uterine smooth muscle tissue. ASMS, TP613 2017

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193. Hazik Asif†, Scott Barnett†, Iain Buxton∗. β3 Adrenergic Receptor Signaling in the Human Myometrium. Society for Reproductive Investigation. Abstract T-017, March 15-19, 2022.

194. Scott D Barnett†∗, Hazik Asif†, Iain L.O. Buxton. Mechano-Receptor Piezo-1 Agonism as a Novel Tocolytic Strategy. Society for Reproductive Investigation. Abstract F-013, March 15-19, 2022.

195. Barnett, S.D., Asif, H., Buxton, I.L.O. (2023, Oral) Myometrial Relaxation Following Piezo-1 and TREK-1 Channel Stimulation is Synergistic. Society for Reproductive Investigation (SRI) Annual Meeting. Abstract 1009.

196. Barnett, S.D., Buxton, I.L.O., Kapri, T., Bell, T. (2023) Novel Small Molecule Modulates Myometrial Cx43 and OXTR Expression Offering Effective Tocolysis. Society for Reproductive Investigation (SRI) Annual Meeting. Abstract 971.

PATENTS

US Patent: Polyphenol Inhibition of Nucleoside Diphosphate Kinase-B Activity and Cancer Metastasis. December 30, 2009; Patent No. 7,678,549.

US Patent Pending: GSNOR Inhibition in Preterm Laboring Myometrium restores quiescence: Prevention of Spontaneous Preterm Birth.

INVITED LECTURES

Invited Leadership Presentations:

Organization and Management Structures for Research & Practice in Schools of Pharmacy: Role of the Dean. New Mexico Health Sciences Center, Albuquerque, April 25, 2002.

Development of a New School of Pharmacy Under Revised ACPE Accreditation Guidelines. Samuel Meritt College, Oakland California, July 2008.

Invited Research Presentations:

Mechanisms of Dysfunctional Quiescence in Spontaneous Preterm Labor. Invited Plenary, Society for Reproductive Investigation, Myometrial Satellite, Orlando Florida, March 2017.

Therapeutic Inhibition of GSNOR in the Management of Preterm Labor. Platform Presentation at the 3rd Annual Clinical Translational Research Meeting (CTR-IN), Las Vegas, NV June 2016.

Intimations on the Metastatic Process in Breast Cancer: *Incommodus Verum* Invited Speaker, (the International Congress of the NDPKinase/Nm23/awd Gene Family a New Frontier in Cell and Cancer Biology. July 31st-Aug. 4th, 2013. Boston University, Boston, Massachusetts, USA

Current Research in Pharmacology and Medicine Milan Institute, October, 2012

New Therapeutic Targets in the Regulation of Myometrial Relaxation. Department of Obstetrics and Gynecology, University of Colorado, Denver. October 11, 2011.

Incommodus Verum: Extracellular Nm23 Signaling in Breast Cancer. Plenary Lecture. Western Pharmacology Society Annual Meeting, Mexico City, Mexico, May 16, 2011

Suppression of Breast Cancer Metastasis by Polyphenols. Plenary Lecture, Western Pharmacology Society Annual Meeting, San Diego, February 8, 2010.

Regulation of human uterine relaxation at term by stretch-activated potassium channels. Plenary Lecture, Western Pharmacology Society Annual Meeting, Acapulco, Mexico, February 12th 2009.

The Physiology of Pregnancy and Parturition. Obstetrics and Gynecology Department, University of Nevada School of Medicine, April 2006

Functional Organization of Myometrial Relaxation Signaling During Labor in Humans. Myometrial Satellite Symposium; Annual Society for Gynecological Investigation Meeting 2005.

Departmental Research Rounds, Regulation of Uterine Contraction in Prematurity, Obstetrics and Gynecology Department, University of Nevada School of Medicine, April 2005

Regulation of Relaxation Signaling in Human Myometrium Plenary Lecture, Western Pharmacology Society Annual Meeting, Honolulu, Hawaii, January 25th 2004.

New Therapeutic Targets in Preterm Labor Research Grand Rounds. Department of Obstetrics and Gynecology, University Medical Center, Las Vegas, NV. October, 2001.

Nitric Oxide Signaling in the Human Pregnant Myometrium. IUPS; XXXIVth International Congress of Physiological Sciences, from Molecule to Malady, Satellite Meeting; Physiology of Pregnancy and Parturition, Auckland, New Zealand, August 2001.

Mechanisms in Vascular Regulation Texas Tech University of the Health Sciences, Amarillo, March 2000.

Role of Nm23 in Human Breast Cancer Metastasis University of Nevada Las Vegas/UNSOM Research Conference, Las Vegas, Nevada, June 1999.

Agonist-mediated ATP Release in Coronary Artery: Evidence in Support of the Purinergic Axis Hypothesis *Conference on Endothelial Regulation of Vascular Tone: Molecular to Integrative Physiology*; American Physiological Society, Augusta, Georgia, 1998.

Role of Protein S-nitrosations in the Regulation of Myometrial Function Invited Lecture, Society for the Study of Reproduction, Puerto Rico, June 20, 2015.

Mammalian Cloning and the Future of Medicine and Society. A scientific primer delivered to the Trustees of the University of Nevada, Reno Foundation, 1997.

The Purinergic Axis in Blood Vessels. University of Maryland, School of Pharmacy, Baltimore, Maryland, July 1997.

Cyclic GMP-Independent Actions of Nitric Oxide in Human Myometrium. Loma Linda School of Medicine, Department of Physiology, Division of Perinatal Biology, Loma Linda, CA, April 1997.

Origin, Sources and Fates of Nucleotides in the Coronary Vasculature. University of Nevada Las Vegas, Invited Seminar, Department of Biology, Las Vegas, Nevada, June 1997.

Nucleotide Regulation of the Coronary Vasculature. University of California Davis, Division of Cardiovascular Sciences, Department of Medicine, October 1996.

On the Nucleotide Axis in Cardiac Blood Vessels. Basic Pharmaceutical Sciences, West Virginia University School of Pharmacy, July 1996.

The Purinergic Axis in Cardiac Blood Vessels. Department of Pharmaceutical Sciences, University of Montana, Missoula, April 1996.

Endothelial Cell Purinergic Mechanisms in Coronary Arteries. Department of Pharmacology, Quillen College of Medicine, Johnson City, Tennessee, April, 1996.

A Role for NO in the Onset of Labor. Symposium; Regulation of Onset of Labor (Chair, I.L.O. Buxton) Society for Gynecological Investigation, Annual Meeting, Philadelphia, 1996

Novel Mechanisms of Purine Nucleotides in Coronary Artery. Symposium; The Purinergic Axis in Blood Vessels. Western Pharmacology Society. Maui Intercontinental, Hawaii. January, 1995.

On the Origin of Extracellular ATP in Cardiac Blood Vessels: A Dual Role for Endothelium. Fifth International Symposium on Adenosine and Adenine Nucleotides. Philadelphia, Penn. May, 1994.

A Purinergic Axis in Blood Vessels. Symposium; *The Role of Adenosine Triphosphate in Peripheral and Central Neurotransmission*. Experimental Biology, Anaheim, Cal. April, 1994.

A Role for Adenyl Purines in Myometrial Function. Loma Linda School of Medicine, Department of Physiology, Division of Perinatal Biology, Loma Linda, CA. June 1993.

Role of Adenyl Purines in Myometrial Function. Department of Pharmacology, University of California, San Diego, December 1992.

Adenosine Receptor Mechanisms in Parturition. Division of Perinatal Biology, Loma Linda School of Medicine, February 1992.

The Role of Adenyl Purines in Myometrial Function. Fourth International Symposium on Adenosine and Adenine Nucleotides. Lake Yamanaka, Japan. May 1990.

α_1-adrenergic Receptor Signal Transduction in the Adult Rat Cardiac Myocyte. Biology of the Isolated Adult Cardiac Myocyte NHLBI RFA Meeting, Asilomar Conference Center, 1987.

INVITED LECTURES

Lectures Presented in Conjunction With Professional Continuing Education Programs:

New Approaches to the Prevention of Preterm Delivery. March of Dimes Women's Health Symposium, Friday, November 19, 2010, Tuscany Suites and Casino, Las Vegas, NV.

Potassium Channel Variants in Spontaneous Preterm Labor. Ob-Gyn Resident Lecture Series, September 2009, Las Vegas, NV

Preterm Labor Treatment: Lack of Efficacy in Current Tocolytics. Continuing Education for Physicians and Nurses, Saint Mary's Perinatal Conference. October 2008, Reno, NV.

Two-Pore Potassium Channels: Basic Updates from Bench to Bedside. *Keynote Lecture* Continuing Education for Physicians and Nurses, Saint Mary's Perinatal Conference, "Autumn in the Sierra: Concepts in Perinatal Care Conference" October, 2007, Reno, NV.

Therapeutic Targets in the Treatment of Preterm Labor. Continuing Education for Physicians and Nurses, Saint Mary's Perinatal Conference, "Autumn in the Sierra: Concepts in Perinatal Care Conference" August, 2003, Reno, NV.

Pharmacotherapy of Joint Diseases. Continuing Education for Physicians and Pharmacists. UNR Department of Continuing Education Program, August, 1999, Reno, NV.

Pharmacology: Introductions to a Basic Medical Science Discipline: Howard Hughes Teacher Fellows Conference, University of Nevada School of Medicine, 1998.

Receptor Theory: The Road to How and Why: Howard Hughes Teacher Fellows Conference, University of Nevada School of Medicine, 1997.

Pharmacology in the Classroom: Howard Hughes Teacher Fellows Conference, University of Nevada School of Medicine, 1996.

Pharmacognosy: Drugs from Plants. Howard Hughes Teacher Fellows Conference, University of Nevada School of Medicine, 1995.

Humanizing Research. Presented to the American Heart Association Delegate Assembly, Las Vegas, Nevada September 1992.

Diabetes Research: The State of the Art Lecture to Physicians and Nurses sponsored by the American Diabetes Association, Las Vegas, Nevada, January 20, 1990.

The Biochemistry of Diabetic Blood Vessels. Lecture to Physicians. Annual Meeting, American Diabetes Association, Las Vegas, NV. May 1989.

Digoxin Use and Misuse: Toxicity and Pharmacokinetics. VA Medical Center Grand Rounds, San Diego, 1984.

Catecholamine Receptor Regulation of Inotropy in Mammalian Heart. Department of Medicine, University of California, Los Angeles, 1984.

Special Intensive Care Unit Pharmacology. American Lung Association, (Provided as Continuing Education credit for Nurses), 1982.

Amrinone in Congestive Cardiomyopathy. Pharmacy Grand Rounds, Veterans Administration Medical Center, 1980.

Propranolol in the Treatment of Angina Pectoris. Veterans Administration Medical Center, 1979. (Provided as Continuing Education credit for Pharmacists.)

Biopharmaceutics and Pharmacokinetics. California Nursing Association, 1979. (Provided as Continuing Education credit for Registered Nurses.)

Public Education/Awareness Lectures

Science in the Interest of Public Health. Video presented by Smoke Free Truckee Meadows in support of reducing smoking and smoke exposure in Northern Nevada. May, 2020 https://youtu.be/HNZeqCtFKiQ

Curing Breast Cancer Keynote Speaker. Annual Meeting, Nevada, Komen for the Cure, 2015.

The path to New Drug Development Invited remarks for the *Whittemore Peterson Institute* fundraising gala, October 2014.

Incommodus Verum: Failing to Understand Breast Cancer Then, What About Now? University of Nevada Honors Program Lecture Series, October, 2011.

Women's Health Research in Nevada Reno Soroptomists Club, April, 2007

Pharmacotherapy Advances in Health Care Delivery Reno Centennial Rotary Club, 2006.

Trouble with the Miracle. Presented to the Reno Lions Club, May 13, 2004.

Real Axis of Evil: Discovery of Pathways to Prevent Disease Sanford Center for Aging: Silver Series Lectures, February 2004.

Why They Couldn't Stop Your Labor. Presented to the Premi Support Group (A parents of premature infants support group), Reno, NV, June 2003.

Current Therapies for Cancer. Sparks, NV Veterans of Foreign Wars Auxiliary, October, 1999.

INVITED LECTURES

Public Education/Awareness Lectures *(continued):*

Science and Medicine: Ethical Conundrums. Presented to the Sparks Sertoma Club, December, 1998.

Human Gene Cloning and Our Responsibility. Presented to the Trustees of the University of Nevada Foundation, November, 1997.

Science, Medicine, Ethics and Cloning. Public lecture given to the Sparks Chapter of the Rotary Club, June 1997.

Hello Dolly: Human Genetics in the 21st Century. Public lecture given to the Reno Chapter of the Rotary Club, April 1997.

Science and Ethics in the Age of Genetic Engineering. Public lecture given to the Universalist Christian Alliance, Reno, November 13, 1996.

Shaping a Healthy Future: The Anatomy and Physiology of the Heart and Blood Vessels. Public lecture given to Washoe County school teachers, Sparks Middle School, February 5, 1996.

The Human Genome Project: Where do we stand? A scientific lecture invited by the liberal clergy of the Truckee Meadows, March 13, 1996.

The Birth of a Baby: Trouble with the Miracle. Rotary Club: Reno Chapter, September 16, 1994.

Let the Beat Go On: Anatomy and Physiology of the Heart and Blood Vessels. University of Nevada School of Medicine: Mini Medical School 1994. Las Vegas. March 2nd, 1994; Reno, March 30th, 1994.

Cells: The Object of Our Fancy! University of Nevada School of Medicine: Mini Medical School 1993. Public Lecture, Las Vegas March 24, 1993; Reno, March 25, 1993.

The State of Cardiovascular Research in the United States. Fraternal Order of Eagles, State Meeting, 1986.