

## CURRICULUM VITAE

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## ACADEMIC DEGREES

- 1982 Ph.D.      **Medical Sciences.**  
American University of Beirut, Beirut, Lebanon
- 1975 M.Sc.      **Biology.**  
American University of Beirut, Beirut, Lebanon.
- 1972 B.Sc.      **Biology.**  
American University of Beirut, Beirut, Lebanon.

## CERTIFICATION

- 2001              Certified blood Alcohol Analyst. Washington State Toxicology Laboratory
- 1991              American Board of Clinical Chemistry.

## ACADEMIC APPOINTMENTS & EMPLOYMENT

- Feb 01-present      **Forensic Scientist**  
*Washington State Toxicology Laboratory, Seattle, WA*
- 1999- 2000          **Forensic scientist**  
*Commonwealth of Virginia, Department of Criminal Justice Services, Division of Forensic Science, Richmond, VA*
- 1999- 2000          **Post-doctorate Fellow, Forensic Toxicology.**  
*The Virginia Institute of Forensic Science and Medicine, Richmond, VA*
- 1998- 1999          **Post-doctorate Fellow, Forensic and Clinical Toxicology.**  
*Medical College of Wisconsin, Department of Pathology, Milwaukee, WI. & Milwaukee County Medical Examiner's Office, Toxicology Department, Milwaukee, WI.*

- 1996-1997 **Assistant Professor, Microbiology & Immunology Dept**, TTUHSC, Lubbock, TX.
- 1996-1997 **Director, Special Clinical Immunology Laboratory**, VAMC, Amarillo, TX
- 1991-1997 **Assistant Professor, Dept. of Internal Medicine**, TTUHSC, Amarillo, TX
- 1990-1996 **Associate Director, Special Clinical Immunology Lab**, VAMC, Amarillo, TX  
*Texas Tech University Health Sciences Center (TTUHSC), Amarillo & Lubbock, TX  
 Veterans Affairs Medical Center (VAMC), Amarillo, TX*
- 1985-1988 **Post-doctorate Fellow, Clinical Chemistry**, Pathology Dept, Iowa City, IA.  
*University of Iowa Hospitals & Clinics, Iowa City, Iowa*
- 1982-1985 **Post-doctorate Fellow**, School of Medicine, Biochemistry Dept, St. Louis, Mo.  
*Saint Louis University, St. Louis, Missouri*
- 1975-78 **Instructor of Biology**, School of Arts & Science, Beirut, Lebanon  
*American University of Beirut, Beirut, Lebanon*

### INDUSTRIAL APPOINTMENTS

- 1997- 1998 **Scientist, Research & Development**  
*SA Scientific Inc., San Antonio, Texas*

### TRAINING & WORKSHOPS

- 2018 **Driving Under the Influence-from Field Investigation to Prosecution.** California Association of Toxicologists. Rohnert Park, CA. May 7-8
- 2017 **Challenges in Toxicology.** California Association of Toxicologists. Las Vegas, NV November 6-7.
- 2017 **The Future Looks Green Current.** California Association of Toxicologists. San Diego, CA. May 5-6.
- 2016 **Forensic Pharmacology: A Comprehensive Review.** Dr. Lionel Raymon. The Center for Forensic Science Research and Education. December 12<sup>th</sup> – 14<sup>th</sup>, 2016
- 2016 **Current Challenges in Toxicology.** California Association of Toxicologists. Palm Springs, CA. Nov 4-5.
- 2016 **Emerging Drugs, Drug Trends, and Testing.** California Association of Toxicologists. Incline Village, NV. May 2-3.

- 2015 **Prescription Drugs: Through the Looking Glass.** California Association of Toxicologists. Irvine, CA. Nov 6-7.
- 2015 **Triple Quadrupole System Training using Analyst® Software for Quantitation.** AB Sciex. Redwood City, CA. April 14-16
- 2014 **Novel Psychoactive Substances (NPS): Pharmacology, Toxicology, and Case Reports.** AAFS 66th Annual Scientific Meeting. Seattle, WA. Feb 18.
- 2014 **Designer Drug Detection in Forensic Toxicology: From Basic to Brilliant.** AAFS 66th Annual Scientific Meeting. Seattle, WA. Feb 17.
- 2014 **Root Cause Analysis- When Blaming the Analyst Completely Misses the Point.** AAFS 66th Annual Scientific Meeting. Seattle, WA. Feb 17.
- 2014 **ASCLAD/LAB-International Internal Auditor Course.** ASCLAD/LAB-International. Seattle, WA. Jan 27-30
- 2013 **Drug Effects on Psychomotor Performance.** California Association of Toxicologists. San Francisco, CA. May 3-4.
- 2012 **Behind the Scenes of High Profile Cases.** California Association of Toxicologists. Glendale, CA. Nov 2-3.
- 2012 **All Things Cannabis.** California Association of Toxicologists. San Jose, CA. May 4-5
- 2011 **Forensic Alcohol: The Challenges and Successes in the Field, Lab, and Courtroom.** California Association of Toxicologists. Glendale, CA. Nov 4-5.
- 2011 **Emerging Designer Drugs.** California Association of Toxicologists. Napa, CA. May 6-7.
- 2010 **Sleep and Driving under the Influence.** California Association of Toxicologists. Sacramento, CA. May 14-15.
- 2010 **Good Measurement Practices in the Proper Use and Calibration of Balances and Pipettes.** AAFS 62<sup>nd</sup> Annual Scientific Meeting. Seattle, WA. Feb 23.
- 2010 **Assessment and Interpretation of Toxicology in Neonatal, Pediatric, and Geriatric Deaths.** AAFS 62<sup>nd</sup> Annual Scientific Meeting. Seattle, WA. Feb 22.
- 2009 **Method Validation Workshop: A Comprehensive Overview.** California Association of Toxicologists. Reno, NV. Nov 6-7.
- 2009 **The Emotionally Intelligent Manager.** 37th Annual FBI Crime Laboratory Development Symposium. Madison, WI. May 4-8
- 2009 **Uncertainty measurements in Forensic Chemistry and Toxicology- Parts I, II, III.** National Institute of Justice & RTI International. Online Activity. Feb 7, March 17, March 31.
- 2008 **Horizontal Gaze Nystagmus.** International Association of Chiefs of Police. , Bainbridge Island, WA. April 23.

- 2008 **Courtroom Testimony Techniques “Success Instead of Survival”.** Ron Smith & Associates, Inc. Seattle, WA Jan 28-29.
- 2007 **Solid Phase Extraction.** Society of Forensic Toxicology. Raleigh-Durham, NC. Oct.15.
- 2007 **Clinical or Forensic Case- A Crossroad for Interpretation.** Society of Forensic Toxicology. Raleigh-Durham, NC. Oct. 16.
- 2007 **LC/MS Training Seminar.** Restek. Seattle, WA. January 26.
- 2006 **1100 Series LC/MSD technology and Software Operation.** Agilent Technologies, Alpharetta, GA. December 5-8.
- 2006 **Depression and Psychosis.** California Association of Toxicologists. San Francisco, CA, June 9-10
- 2006 **Pediatric Postmortem Toxicology.** AAFS 58<sup>th</sup> Annual Meeting. Seattle, WA. Feb 23.
- 2006 **Driving under the Influence of Drugs- Updates and Case Studies.** AAFS 58<sup>th</sup> Annual Meeting. Seattle, WA. Feb 23.
- 2006 **Identification Criteria for Drugs with Mass Spectrometry: Current Recommendations and Prospects for Emerging MS Techniques.** AAFS 58<sup>th</sup> Annual Meeting. Seattle, WA. Feb 21.
- 2006 **Interpretation of Toxicological Analysis in the Elderly.** AAFS 58<sup>th</sup> Annual Meeting. Seattle, WA. Feb 20.
- 2006 **Analgesics, Pain Management, and Addiction Workshop.** California Association of Toxicologists. San Diego, CA, Jan 27-28
- 2005 **Advanced Roadside Impaired Driving Enforcement. The A-RIDE Pilot Project.** National Highway Safety Administration. Tacoma, WA, Oct. 10-11.
- 2005 **Eliminating False Positive and False Negative Results in the Toxicology Laboratory.** XIX International Congress of Clinical Chemistry. Orlando, FL, July 25.
- 2005 **Developing Consensus Guidelines for Implementation and Utilization of Mass Spectrometry in Clinical Laboratory.** XIX International Congress of Clinical Chemistry. Orlando, FL, July 25.
- 2005 **Increasing the Use of Mass/Tandem Mass Spectrometry in Clinical Laboratories.** XIX International Congress of Clinical Chemistry. Orlando, FL, July 24.
- 2005 **Moot Court: Driving Under the Influence of Drugs and alcohol; a Training Experience.** California Association of Toxicologists. Garden grove, CA, June 3.
- 2004 **Poisons and Venoms of the Southwest.** California Association of Toxicologists. Tempe, AZ, Sept. 25.
- 2004 **SSRI Drugs.** California Association of Toxicologists. Tempe, AZ, Sept. 24.

- 2004 **The Effects of Drugs on Human Performance and Behavior.** Indiana University; Robert Borkenstein Center for Studies of Law in Action. Bloomington, IN, Sept 19-22.
- 2004 **DWI Detection and Field Sobriety Testing.** Seattle Police. Seattle, WA. April 14-16.
- 2004 **Exotic Drugs and Toxins Workshop.** California Association of Toxicologists. Oakland, CA. March 12-13.
- 2003 **Drugs and Driving.** California Association of Toxicologists. Culver City, CA, November 7.
- 2003 **Preparation and Planning for Laboratory Accreditation by the American Board of Forensic Toxicology (ABFT).** Society of Forensic Toxicology. Portland, OR. October 21.
- 2003 **Developments and Pharmacology of Antiepileptic drugs.** Society of Forensic Toxicology. Portland, OR. October 21.
- 2003 **Practical application of LCMS in Routine Forensic Toxicology.** Society of Forensic Toxicology. Portland, OR. October 20.
- 2003 **Psychopharmacology 2003; A Comprehensive Guide to Psychotropic Medication.** Barry Pierce, MD. R. Cassidy Seminars. Bellevue, WA. October 17.
- 2003 **Standardized Field Sobriety Tests, A refresher.** Washington State Patrol. Bellevue, WA. May 28.
- 2003 **Workshop on Interpretive Toxicology.** The Joint meeting of the California Association of Toxicologists and Southern association of toxicologists. Albuquerque, NM, May 2.
- 2003 **The A-Z of Marijuana.** Canadian Society of Forensic Science. Vancouver, Canada, March 26.
- 2003 **Chemical Drugs and the Rave Culture.** Canadian Society of Forensic Science. Vancouver, Canada, March 27.
- 2001 **The Robert F. Borkenstein Course on Alcohol, Drugs, and Highway Safety: Testing, Research, and Litigation.** Indiana University Center for Studies of Law in Action.
- 1996 **HIV Viral load testing using NASBA amplification.** Organon Teknika.
- 1995 **Alcohol in Health and disease.** AACC Annual Meeting. Anaheim, CA, July 19.
- 1994 **Pathology Practicum: Diagnostic Molecular Pathology.** College of American Pathologists & University of Southern California & Los Angeles County Hospital, Los angels, CA, Feb 14-25.
- 1990 **Southern Hybridization Workshop.** ONCOR, Gaithersburg, MD.

### PROFESSIONAL ACTIVITIES

- 2004-05 Secretary; Pacific Northwest Section of the American Association of Clinical Chemistry.
- 1999 Scientific Advisory Board for the Society of Forensic Toxicology (SOFT) for the annual meeting "SOFT 2000 Milwaukee"
- 1998-1999 Assistant editor of sMATTerings; a newsletter for the Midwest Association for Toxicology and Therapeutic Drug Monitoring
- 1993-1996 Member of the "College of American Pathologists" inspection team.
- 1993-1995 Reviewer for "Clinical & Diagnostic Laboratory Immunology"

### PROFESSIONAL ORGANIZATIONS

- 2008-present Society of Forensic Toxicologists, member
- 1999 Midwest Association for Toxicology and Therapeutic Drug Monitoring, member
- 1999 International Association of Therapeutic Drug Monitoring & Clinical Toxicology (IATDMCT), member
- 1985-present. American Association of Clinical Chemistry, member
- 1988 The New York Academy of Sciences, member.

### RECOGNITION AND AWARDS

- 1981 Diana Tamari Sabbagh Travel Award, American University of Beirut
- 1986 AACC Travel Award
- 1989, 92, 94-96 Clinical Chemists Recognition Award
- 1994 HIV Education Project Award

### COMMITTEES

- 1998- 1999 Founder of Pharmacogenetic Journal Club  
Department of Pathology, Medical College of Wisconsin, Milwaukee, WI.
- 1995- 1996 Clinical Investigations Committee  
Don & Sybil Harrington Cancer Center, Amarillo, TX.
- 1990- 1996 HIV/AIDS Committee  
Veterans Affairs Medical Center (VAMC), Amarillo, Texas

### PUBLICATIONS

#### **BOOK CHAPTERS**

Catherine A Phillips & **Naziha F Nuwayhid**. The malignant state: The molecular, cytogenetic, and immunologic basis of cancer, In Clinical Oncology. 1993. pp.3-10. Geoffrey Weiss, ed. Appleton at Lange.

Steven H. Wong, Susan B. Gock, Run-Zhang Shi, Ming Jin, Michael A. Wagner, B. Charles Schur, Paul Jannetto, Elvan Lalei-Sahin, Jeanette Bjerke, **Naziha Nuwayhid**, & Jeffrey M. Jentzen. Pharmacogenomics as an Aspect of Molecular Autopsy for Forensic Pathology/Toxicology, In Pharmacogenomics and proteomics. 2006. pp.311-18. AACC Press

## INVITED REVIEW

**Nuwayhid N** (1995) Serologic tests for indirect detection of HIV-1 infection. *Clin Diagnostic Lab Immunol* 6:637-45

## SCIENTIFIC ARTICLES

Petersen TH, Williams T, **Nuwayhid N**, Harruff R (2012) Postmortem detection of isopropanol in ketoacidosis. *J Forensic Sci* 57(3): 674-678.

Schur BC, Bjerke J, **Nuwayhid N**, Wong SH (2001) Genotyping of cytochrome P450 2D6\*3 and \*4 mutations using conventional PCR. *Clin Chim Acta* 308:25-31.

Gock SB, Wong SHY, **Nuwayhid N**, Venuti SE, Kelley PD, Teggatz JR, Jentzen JM (1999) Acute zolpidem overdose- report of two cases. *J Anal Tox* 23(6):559-62.

Uy J, **Nuwayhid NF**, Saadeh C (1996) Unusual presentation of gout: Tips for accurate diagnosis. *Postgraduate Medicine* 100(10):253-268.

**Nuwayhid NF**, Johnson GF, Feld RD (1989) A multipoint kinetic method for the simultaneous measurement of the combined concentrations of acetoacetate- $\beta$ -hydroxybutyrate and lactate-pyruvate. *Clin Chem* 35:1526-31.

**Nuwayhid NF**, Johnson GF (1989) Digoxin elimination in a functionally anephric patient after digoxin-specific Fab fragment therapy. *Ther Drug Monit.* 11:680-5.

**Nuwayhid NF**, Johnson GF, Feld RD (1989) Kinetic measurement of the combined concentrations of acetoacetate and  $\beta$ -hydroxybutyrate in serum. *Clin Chem* 34:1790-3.

Czervionke RL, Johnson GF, **Nuwayhid NF**, Feld RD (1986) Quantification of analyte and interferent by multipoint analysis. *Clin Chem* 32:1648-54.

**Nuwayhid N**, Glaser JH, Johnson JC, Conrad ED, Hauser S, Hirschberg CB. (1986) Xylosylation and glucuronidation reactions in rat liver Golgi apparatus and endoplasmic reticulum. *J Biol Chem* 261:12936-41.

Deutscher SL, **Nuwayhid N**, Stanley P, Briles EB, Hirschberg CB (1984) Translocation across Golgi vesicle membranes: a Chinese hamster ovary glycosylation mutant deficient in CMP-sialic acid transport. *Cell* 39:295-9.

## ABSTRACTS & PRESENTATIONS:

**Nuwayhid N**, Wickham D, Gordon AM, Logan BK. (2007) Postmortem cesium concentrations in a cancer patient: A case report. Joint Meeting of the International Association of Forensic Toxicologists (TIAFT) and the International Council on Alcohol, Drugs and Traffic Safety (ICADTS), Seattle, WA.

Schranz D, Loew S, Raven K, **Nuwayhid N**, Gordon AM, Logan BK. (2003) Death following long term fluoxetine use. Society of Forensic Toxicologists Annual Meeting, Portland, Oregon.

**Nuwayhid N**, Wong SHY, Gock S, Kelley PD, Jentzen JF (1999) A case report of postmortem immunosuppressant concentration. Ther Drug Monit. 21(4):439.

**Nuwayhid N**, Wong SHY, Ashwood L, Mayer L, Saryan L, Linke G, Taha T (1999) Prevalence of elevated blood lead concentrations in children in the Milwaukee population. Clin Chem 45(S6):A21.

Manis L, **Nuwayhid N**, Wong SHY, Hariharan S, Bresnahan B (1999) Monitoring of mycophenolic acid and mycophenolic acid glucuronide in patients post renal transplantation. Clin Chem 45(S6):A126

Schur BC, Bjerke J, **Nuwayhid N**, Wong SHY (1999) Towards genotyping CYP2D6. Annual Meeting of the Midwest Association for Toxicology & Therapeutic Drug Monitoring, Minneapolis, MN, April 30-May 1

**Nuwayhid N**, SB Gock, Wong SHY, PD Kelley, JR Teggatz, JM Jentzen (1999) Acute zolpidem overdose- A case report. 6<sup>th</sup> International Congress of Therapeutic Drug Monitoring & Clinical Toxicology. Cairns, Australia, September 13-17.

**Nuwayhid N**, Wong SHY, S Gock, PD Kelley, JF Jentzen. (1999) A case report of postmortem immunosuppressant concentrations. 6<sup>th</sup> International Congress of Therapeutic Drug Monitoring & Clinical Toxicology. Cairns, Australia, September 13-17.

**Nuwayhid NF** (1996) Emerging and standard tests for the diagnosis and prognosis of HIV-1 infection. The Primary Care Perspective of the AIDS Continuum. Amarillo, Texas, May 31-June 1.

El-Shar A, Saadeh C, **Nuwayhid NF** (1996) Antiphospholipid antibody syndrome (APAS): an unusual presentation in an adolescent male. Accepted for presentation at the 90th Annual Scientific Assembly of the Southern Medical Association. Baltimore, Maryland, November 20-24.

Uy J, Saadeh C, **Nuwayhid NF** (1995) Unusual presentation of gout: lessons and guides to the primary care physician. 89th Annual Scientific Assembly of the Southern Medical Association. Kansas City, Missouri, November 15-19.

**Nuwayhid NF**, Phillips CA (1994) HealthNet Program: Update on HIV/AIDS Testing, Regional Healthcare provider teleconference. Amarillo, Texas. June.

Cone JC, Lu Y, Bjrondahl J, **Nuwayhid N**, Trevillyan J, Phillips CA (1992) Signal transduction requirements of the Fc $\gamma$ RIII (CD16) in the continuous NK cell line, NK3.3. Eight international natural killer cell workshop and first meeting of the society of natural immunity. Tampa, Florida, October 4-6.



**Nuwayhid NF**, Johnson GF (1989) Elimination of total digoxin from a patient in chronic renal failure post Fab fragment (digibind) therapy. Clin Chem 35:1179.

**Nuwayhid NF**, Johnson GF, Feld RD (1989) Simultaneous measurement of ketone bodies: acetoacetate (AcAc) and  $\beta$ -hydroxybutyrate (BHB). Clin Chem 32:1175.

**Nuwayhid N**, Glaser JH, Johnson JC, Conrad ED, Hauser S, Hirschberg CB (1985) Mechanisms of glucuronidation and xylosylation in rat liver endoplasmic reticulum and Golgi apparatus. J Cell Biol 101:439a.

**Nuwayhid N**, Coe E (1982) Motility and aggregation in cellular slime mold amoebae. Seventh Meeting of the Lebanese Association for the Advancement of Science.

**Nuwayhid N**, Coe E (1981) Effects of dimethylsulfoxide (DMSO) on the development of D. discoideum. Fed Proc 40:556

Jannun R, **Nuwayhid N**, Coe E. (198) Biological bromination: bromoperoxidase activity of the Murex sea snail. Fed Proc 40:1774.

Coe E, **Nuwayhid N** (1980) Response to c-AMP in suspension culture of wild type D. discoideum. Fed Proc 39:1953