

# ASA LOUIS

Washington State Patrol Toxicology Laboratory  
2203 Airport Way South  
Seattle WA 98134  
(206) 262 6100  
asa.louis@wsp.wa.gov

## EMPLOYMENT HISTORY

### **Washington State Patrol**, Seattle WA

Forensic Scientist - Toxicology

Jan 2003 - May 2005, May 2006 – present

- Analyse forensic samples for presence of licit and illicit substances
- Prepare reports of findings, testify as an Expert Witness in courts of law pertaining to findings
- Maintain instrumentation, develop and/or refine analytical methodologies
- Participate in professional accreditation programs as a Technical Assessor (ANAB)
- Participate in professional accreditation programs as an Internal Auditor (ANAB)
- Train stakeholders via continuing education presentations regarding toxicology basics
- Develop curricula for understanding toxicology for non-scientists

### **Mayo Clinic**, Rochester MN

Development Technologist

May 2005 - May 2006

- Update and improve existing methods, implement validated new technology
- Organize validation data, prepare data for peer review, presentation and/or publication
- Investigate, install and evaluate laboratory equipment
- Train laboratory staff in principles of new/modified methods

### **Provincial Toxicology Centre**, Port Coquitlam BC

Forensic Analyst

Sep 1991 - Apr 1992, Jul 1996 - Dec 2002

- Prepare and analyse samples for abusive and non-abusive substances
- Report forensic and clinical results
- Testify as an Expert Witness in courts of law pertaining to findings
- Maintain instrumentation, develop and/or refine analytical methodologies
- Accession forensic and clinical samples

### **ASL Laboratories**, Vancouver BC

Section Coordinator, Purchaser

May 1992 - Jun 1996

- Coordinate daily activities of 3-4 staff members in the Extractable Hydrocarbons Group
- Prepare and quantify samples for organic compound content
- Accession samples for testing, sublet samples to support laboratories
- Purchase, receive and distribute materiel from suppliers
- Emergency Spill Response Team Member

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## EMERGENCY MANAGEMENT HISTORY

### **Northshore Emergency Management Coalition (NEMCo), Kenmore WA**

Community Emergency Response Team (CERT) volunteer

Nov 2015 – present

- Lead training of new CERT participants
- NEMCo point of contact for Disaster Airlift Response Team (DART)
- Steering committee member
- Participate in continuing education, through local and FEMA sponsored courses
- Conduct and participate in drills for emergency preparedness
- Support community events, active shooter training

### **South Snohomish County Fire/ Fire District 1, Everett WA**

CERT Fire Corps volunteer

Feb 2017 – present

- Aid in training new CERT participants
- Participate in continuing education, through local and FEMA sponsored courses
- Support community events, active shooter training

### **Seafair Emergency Management Group, Seattle WA**

Volunteer – Logistics, Medical

May 2017 – present

- Support the equipment and transportation needs of the EMG
- Provide first-response level medical care to event guests, participants and staff
- Assist in event safety, crowd management, traffic control

## ACADEMIC HISTORY

### **Post Baccalaureate Diploma Program - Environmental Toxicology**

Simon Fraser University. Graduated: Apr 1992

### **Bachelor of Science - Biochemistry**

University of British Columbia. Graduated: Apr 1988

## PROFESSIONAL AFFILIATIONS/ CERTIFICATIONS

Forensic ISO/IEC 17025:2017 Technical Assessor – 2019

Forensic ISO/IEC 17025:2017 Internal Auditor – 2019

Forensic Toxicology Specialist Certification (D-ABFT-FT) – 2010

Washington State Blood Analyst Permit - 2003

International Association For Chemical Testing (IACT) - Member 2010

The American Academy of Forensic Sciences (AAFS) - Member 2010

The International Association of Forensic Toxicologists (TIAFT) - Member 2009

Society of Forensic Toxicologists (SOFT) - Member 2009

California Association of Toxicologists (CAT) - Associate Member 2009

Canadian Society of Forensic Science (CSFS) - General Member 2009

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## PUBLICATIONS

Louis A, Peterson BL, Couper FJ. XLR-11 and UR-144 in Washington State and State of Alaska Driving cases. J Anal Toxicol. 2014 Oct;38(3): 563-568

Louis A, Logan BK, Couper FJ. Contribution of Fruit Consumption to Ethanol Breath Measurement. Poster presentation - Society of Forensic Toxicologists Meeting, Phoenix AZ, Oct 2008

Louis A, Gordon AM, Logan BK, Indahl J, Fusaro, A. Death and Brain Injury from an Apparent Intentional Methomyl Poisoning. Platform presentation - ICADTS/TIAFT Meeting, Seattle WA, Aug 2007

Langman LJ, Kaliciak HK, Louis A. Death Attributed to Intravenous Oxycodone. Poster presentation - 55th Annual AAFS Meeting, Chicago IL, Feb 2003

## EMERGENCY MANAGEMENT CERTIFICATIONS

Executive: (please contact for complete list)

- IS-100 Introduction to Incident Command System
- IS-200 ICS for Single Resources and Initial Action Incident
- IS-700 National Incident Management System (NIMS)
- IS-800 National Response Framework, An Introduction
- IS-15 Special Events Contingency Planning For Public Safety Agencies
- IS-120 An Introduction to Exercises
- IS-130 How to be an Exercise Evaluator
- L489 Leadership Reaction Course – NW Citizen Corps Expo
- Management of Spontaneous Volunteers in Disasters
- Search Management for the Initial Response Incident Commander
- Urban Search – Managing Missing Person Searches in the Urban Environment

Operations: (please contact for complete list)

- Wilderness First Responder – NOLS
- Ham Radio Operator – General Class License
- Washington State Food Worker – Snohomish County Health
- Washington State Traffic Control Flagger
- ATC20 Postearthquake Safety Evaluation of Buildings
- ATC45 Safety Evaluation of Buildings After Windstorms and Floods
- P-50 Simplified Seismic Assessment of Detached Wood-frame Dwellings
- Stop The Bleed – Harborview Medical Center
- PER213 Wide Area Search
- Post Disaster Mental Health Support – Kirkland CERT
- American Sign Language in Emergencies - NW Citizen Corps Expo

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## PRESENTATIONS

- 2019 WA TSRP – Effects of Alcohol and Marijuana. Tacoma
- 2018 WA Defenders Association – A View From the Lab: Test Blood for For Drugs. Tacoma
- 2018 Pierce County Department of Assigned Council – Introduction to The Toxicology Lab.
- 2018 WA Association of Prosecuting Attorneys – DUI Bootcamp. Burién
- 2018 WA TSRP – THC and Toxicology; Fentanyl – a Primer. Yakima
- 2017 DEA – Drug Effects on Human Performance. Seattle
- 2017 Pierce County Department of Assigned Council – THC General Overview. Tacoma
- 2017 WA TSRP – Toxicology and Marijuana Case Overview. Yakima
- 2016 WA Department of Licensing – Toxicology Laboratory Test Results. Tacoma
- 2016 WA Association of Prosecuting Attorneys – Uncertainty Levels and Mixed Alcohol and Marijuana DUI. Leavenworth
- 2015 Pierce County Department of Assigned Council – Defending DUI's: Blood Testing and the Effects of Alcohol and Drugs, DRE. Tacoma
- 2015 WA Association of Prosecuting Attorneys – Mixed Ethanol and THC DUI's. Leavenworth
- 2015 Pierce County Prosecuting Attorney – Toxicology Laboratory Overview. Tacoma
- 2013 WA State Assn of Municipal Attorneys – Prosecuting a Drugged Driver. Walla Walla
- 2013 Seattle Police Department DRE school – Toxicology Laboratory Overview. Seattle

## RELATED SKILLS

Tandem / Mass Selective Liquid Chromatography  
High Turbulence Liquid Chromatography  
Mass Selective Gas Chromatography  
Gas Chromatography  
High Pressure Liquid Chromatography  
Radio-Immuno Assay Techniques  
Colloidal Immuno Assay Techniques  
Ultraviolet Spectrophotometry  
Thin Layer Chromatography  
Supercritical Fluid Extraction  
Solid Phase Extraction

## TRAINING

- 2019 ANSI National Accreditation Board – Technical Assessor Training Course
- 2019 ANSI National Accreditation Board – Internal Auditor Training Course
- 2018 SOFT – How Do You Analyze For That?
- 2018 RTI International – Interpretive Toxicology for NPS in Forensic Casework
- 2018 RTI International - Current Trends in Forensic Toxicology
- 2017 Calif. Assoc. Toxicologists – The Future Looks Green
- 2017 Advances in Forensic Analyses: When to Use GC-MS/MS, LC-MS/MS and HRMS
- 2017 SOFT/ACCENT – Assessment and Comparison of Vitreous Humor as an Alternative Matrix for Forensic Toxicology
- 2016 SOFT/ACCENT – Analysis of Parent Synthetic Cannabinoids in Blood and Urinary Metabolites by Liquid Chromatography Tandem Mass Spectrometry
- 2016 SOFT/ACCENT – Retrospective Analysis Synthetic Cannabinoid Metabolites in Urine of Individuals Suspected of Driving Impaired
- 2016 SOFT/ACCENT – Thermal Degradation of Synthetic Cathinones
- 2015 Calif. Assoc. Toxicologists – Z-Drugs Workshop
- 2015 UND School of Medicine - Death Investigation Advanced Topics
- 2015 UND School of Medicine - Death Investigation Cultural Competency
- 2015 UND School of Medicine - Death Investigation Basics

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- 2015 UND School of Medicine - Death Investigation Mental Health First Aid
- 2014 AAFS - Designer Drug Detection in Forensic Toxicology: From Basic to Brilliant
- 2014 AAFS - Novel Psychoactive Substances: Pharmacology, Toxicology and Case Reports
- 2014 AAFS - Driving Under the Influence of Drugs
- 2014 LCGC Chromacadamy - Optimizing LC-MS Ionization Conditions pt 1
- 2013 RTI International - Fundamentals of Mass Spectrometry in Toxicology
- 2013 RTI International - Fundamentals of Chromatography used in Toxicology
- 2013 RTI International - Pills and Particles: Toxicology and Linking Trace Evidence
- 2013 The Evidence Conference - What Makes a Credible Witness
- 2013 West Virginia University - Perspectives in Expert Testimony
- 2012 U. of New Mexico - Sudden Death - Cause of Death Scenarios that Mimic One Another
- 2012 West Virginia University - Ethics in Forensic Sciences
- 2012 RTI International - Z Drugs on Demand
- 2012 RTI International - Fundamentals of Immunoassay Testing Used in Toxicology
- 2012 RTI International - Drug Facts: A DFSE Perspective
- 2011 Calif. Assoc. Toxicologists - Forensic Alcohol
- 2011 Midwest Forensic Research Center - Symposium on the Toxicology of DUID
- 2011 Washington State Patrol - Horizontal Gaze Nystagmus (Dr. K Citek)
- 2011 Siemens Webinar Series - Spice
- 2010 Washington State Patrol - Spice (J Messick, Anchorage Prosecutors Office)
- 2008 Seattle Police Dept. - Advanced Roadside Impaired Driving Enforcement
- 2008 SOFT - The "Stimulating" Realm of Sympathomimetic Amines and Tryptamines
- 2008 SOFT - Applications of LC-MS in Human and Veterinary Toxicology
- 2008 Washington Traffic Safety Commission - DRE In-service Training
- 2007 Indiana University - The Effects of Drugs on Human Performance and Behaviour
- 2006 Mayo Clinic - Analyst Advanced Training (J Withers, Applied BioSystems)
- 2006 Mayo Clinic - Oral Fluids: Research and Applications (Dr. M Wagner, NH State Police)
- 2005 Mayo Clinic - Development Quality School
- 2004 Seattle Police Dept. - DUI Detection and Standardized Field Sobriety Testing (NHTSA)
- 2004 Northwest Assn. For. Sci. - Marijuana: A Forensic Symposium
- 2004 Northwest Assn. For. Sci. - Forensic Applications of LCMS
- 2004 Northwest Assn. For. Sci. - GC/MSD maintenance
- 2003 Indiana University - Robert F Borkenstein course on Alcohol and Highway Safety
- 2003 SOFT - Principles of Sample Preparation
- 2003 SOFT - Practical Applications of LCMS in Routine Forensic Toxicology
- 2003 Washington State Patrol - Standard Field Sobriety Test Training (Refresher)
- 2003 Canadian Soc. For. Sci. - The A-Z of Marijuana
- 2003 Canadian Soc. For. Sci. - Rave On! Chemical Drugs and the Rave Culture
- 2003 Washington State Patrol - Blood Alcohol Analyst
- 2002 Pittsburgh Conference - Intermediate LC/MS Techniques
- 2002 Can. Comm. Epidemiology Network/ADIC - Methamphetamine Environmental Scan Summit
- 2000 UBC - Radionuclide Safety and Methodology
- 1997 Riverview Hospital - Transportation of Dangerous Goods - Biological
- 1995 ASL Labs - Transportation of Dangerous Goods - Chemical
- 1993 Hewlett-Packard - 5890 Troubleshooting and Maintenance
- 1992 ASL Labs - WHMIS
- 1992 Hewlett-Packard - HP Columns
- 1992 Greiner, Bethell & Company - Expert Witness