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# ASA LOUIS

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WASHINGTON STATE PATROL TOXICOLOGY LABORATORY  
2203 AIRPORT WAY SOUTH  
SEATTLE WA 98134  
(206) 262 6100  
asa.louis@wsp.wa.gov

## WORK HISTORY

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

Forensic Scientist - Toxicology

Jan 2003 - May 2005, May 2006 - present

Accession, extract and analyse forensic samples for presence of licit and illicit substances  
Report findings, testify in courts of law pertaining to findings, and as an Expert Witness  
Prepare, certify solutions used in the Breath Test Program and testify in courts of law pertaining to such  
Maintain instrumentation, develop and/or refine analytical methodologies  
Conduct "drinking labs" to investigate effects of alcohol on human performance  
Participate in "In Field Observation / Ride-along" program with police agencies

### **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, quantitatively and qualitatively analyse samples for abusive and non-abusive substances  
Report forensic and clinical results  
Testify in court of law pertaining to findings  
Maintain instrumentation, develop and/or refine analytical methodologies  
Accession forensic and clinical samples

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

Section Co-ordinator, Purchaser

May 1992 - Jun 1996

Co-ordinate 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  
Member of Emergency Spill Response Team

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## 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 Toxicology Specialist Certification (D-ABFT-FT) - 2010  
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

## 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 II, Feb 2003

## PRESENTATIONS

- 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 Association of Municipal Attorneys – Prosecuting a Drugged Driver. Walla Walla
- 2013 Seattle Police Department DRE school – Toxicology Laboratory Overview. Seattle

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## RELATED SKILLS

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 Chromatography

## TRAINING

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  
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 Chromacademy - 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)

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2008 Seattle Police Dept. - Advanced Roadside Impaired Driving Enforcement  
2008 Soc. For. Toxicologists - The "Stimulating" Realm of Sympathomimetic Amines and Tryptamines  
2008 Soc. For. Toxicologists - 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 Assoc. For. Sci. - Marijuana: A Forensic Symposium  
2004 Northwest Assoc. For. Sci. - Forensic Applications of LCMS  
2004 Northwest Assoc. For. Sci. - GC/MSD maintenance  
2003 Indiana University - Robert F Borkenstein course on Alcohol and Highway Safety  
2003 Soc. For. Toxicologists - Principles of Sample Preparation  
2003 Soc. For. Toxicologists - 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