

# Robson Forensic

Engineers, Architects, Scientists & Fire Investigators

## MARIA BELLA, AFOIT, CPOI, LGI Sports and Recreation Expert

### PROFESSIONAL EXPERIENCE

2004 to **Robson Forensic, Inc.**

present *Associate*

Provide technical investigations, analysis, reports, and testimony towards the resolution of commercial and personal injury litigation involving athletic activities, sports facilities, coaching, staff training and oversight, and child supervision.

2006 to **Fournier Robson & Associates, LLC**

present *Associate*

Provide technical analysis of aquatic feature design and construction methods to determine compliance with local code and industry standard of care. Specify circulation and sanitation equipment. Evaluate operation protocol and troubleshoot system failures.

2003 to **Professional Pool Solutions, LLC**

present *Partner*

Provide aquatic consulting and training services to colleges and universities, municipalities, school districts, general contractors, and the hotel/motel industry. Investigate and document incidents resulting in injury and/or property loss. Review supervisory practices, operational protocol and maintenance procedures. Troubleshoot problems. Develop risk management strategies. Perform operational cost analyses. Provide instruction and certification for staff including lifeguards, aquatic facility operators, certified pool operators, pool technicians, and maintenance personnel.

2005 to **FUNdaMENTAL FITness, inc.**

2009 *CEO*

Train instructors in child supervision, safety, and athlete development techniques. Create age and skill appropriate dryland and water-based exercises and activities. Provide tracking and evaluation programs for instructors and participants. Supervise patrons and staff. Provide risk management inspections and address hazards.

2002 to **Main Line Commercial Pools, Inc.**

2005 *Risk Management Specialist*

Provided training, risk management, and consultation services to swimming pool operators at institutional, municipal, and public recreational facilities that ranged in size from small indoor therapy pools to multi-attraction outdoor waterparks. Services provided to clients included operational safety evaluations, recreational water analyses, and system design/installation.

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- 2001 to 2004 **Meyer Jabara Hotels**  
*Athletic Facilities Champion*  
Inspected aquatic and fitness facilities and developed systems to increase safety. Trained company engineers in athletic facility operations including equipment selection, operation, and maintenance; chemical selection, storage and handling; hazard identification, evaluation and risk management processes. Provided ongoing education in recreational water illness prevention, suction entrapment protection, and staff development.
- 1999 to 2004 **Sheraton Hotel**  
*Health Club Director*  
Developed, implemented, and oversaw operation and maintenance program for recreation areas including fitness center, swimming pool and hot tub, volleyball court and miniature golf. Specified, purchased and when necessary repaired associated equipment. Brought facility into compliance with all codes and the standard of care. Contributed to R&D of chemical feed system for high-use pools and developed ancillary chemical treatment process. Implemented advanced training for staff, including processes for crowd control and handling intoxicated patrons. Served on hotel safety committee. Served as Manager on Duty for hotel as requested.
- 1986 to 2000 **Albright Aquatic Club; Barracuda Swim Team; Dynamic Aquatics, Inc.**  
*USA Swimming Head Coach*  
**Schuylkill Valley High School, Centaurus High School**  
*Head Swim Coach*  
Coached all levels of competitive swimmers, from novice through elite athletes. Created systems that incorporated traditional race development, water exercise, and cross-training for athletes. Developed and oversaw weight-lifting and nutritional programs for participants. Introduced mental training skills. Selected, instructed and supervised assistant coaching staff. Worked as liaison between administration and parents' organizations. Supervised all team-related activities including marketing, fund raising, equipment purchase and maintenance, pool scheduling and operation of multiple athletic facilities. Served as editor of *North Texas Swimming News*. Organized competitions and coordinated meet administration.
- 1986 to 1990 **Saine Concepts Inc.**  
*Owner*  
Created start-up business responsible for final-clean on new and renovated commercial properties. Budgeted and bid all projects. Hired, trained, and supervised staff at multiple job sites. Purchased and maintained equipment. Expanded into general contractor duties including project development, sub-contractor scheduling and oversight, budgeting, cost-control, and risk management.

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1978 to **City of Boulder, City of Broomfield, City of Lafayette**

1990 *Pool Manager/Swim Coach/Water Safety Instructor/Lifeguard*

Responsible for all aspects of swimming pool operation. Coordinated and scheduled all pool-related activities. Hired, trained, and supervised aquatic staff. Instituted new budget and financial control procedures. Developed maintenance program for pool, enclosure, and grounds. Oversaw chemical treatment and monitoring of pool water sanitation levels. Initiated infant and toddler learn-to-swim program. Introduced adult water exercise program. Advised on all other swimming instruction from beginner through competitive swimmer. Devised child supervision program. As swim team coach, trained competitive swimmers; oversaw all team activities; recruited participants; organized swim meets; planned budgeting, fund raising, and promotional activities; instituted and provided oversight on risk management procedures.

## PROFESSIONAL CREDENTIALS

### American Red Cross

Administering Emergency Oxygen Instructor  
Basic Water Rescue Instructor  
Bloodborne Pathogens Training Instructor  
CPR/AED for the Professional Rescuer Instructor  
Basic/Advanced First Aid Instructor  
GuardStart Instructor  
Lifeguard Instructor  
Lifeguard Management Instructor  
Safety Training for Swim Coaches Instructor  
Shallow Water Attendant Instructor  
Sports Safety Training Instructor

### National Association of Amusement Ride Safety Officials

Certified Amusement Ride Safety Inspector

### National Recreation & Park Association

Aquatic Facility Operator  
Aquatic Facility Operator Instructor  
Aquatic Facility Operator Instructor Trainer

### National Swimming Pool Foundation

Certified Pool Operator  
Certified Pool Operator Instructor

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Pennsylvania Department of Agriculture  
Certified Pesticide Applicator, Category 24  
Pesticide Applicator Instructor, Core and Category 24

Pennsylvania Department of Health  
Emergency Medical Technician

SCUBA Schools International  
Certified Master Diver  
Specialty training:  
Deep diving  
Drysuit diving  
Navigation  
Night and Limited Visibility  
Stress & Rescue  
Waves, Tides, and Currents  
Wreck diving

United States Water Fitness Association  
National Water Fitness Master Instructor  
National Water Fitness Program Coordinator

### PAST CERTIFICATIONS

Water Safety Instructor  
Water Fitness Instructor Trainer

### EDUCATION and TRAINING

Keiser University  
Aquatic Engineering  
University of Colorado  
Pre-medicine  
American Red Cross  
Lifeguard Instructor  
Department of Transportation  
Emergency Medical Technician  
National Recreation and Park Association  
Aquatic Facility Operator Instructor  
National Aquatics Management School  
National Playground Safety Institute

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National Swimming Pool Foundation  
Certified Pool Operator Instructor  
World Aquatic Health Conference, 2005-2008  
Aquatic Facility Design and Risk Reduction  
Aquatic Health Benefits and Therapy  
Drowning Prevention and Lifeguarding  
Recreational Water Illness and Injury Prevention  
Disinfection By-Products  
Industrial New Technology  
Juvenile Obesity: Program Creation for Successful Aquatic Intervention  
Aqua-Activity: A Pathway to Health and Function  
Recreational Water Illness Prevention—Lessons Learned  
Filtration & Circulation—Model Aquatic Health Code Recommendations & Rationale  
The Good, The Bad, & The Volatile: Can We Have Both Healthy Pools & Healthy People  
Rescue Statistics for the Waterpark Environment  
Disinfection & Water Quality—Model Aquatic Health Code Recommendations & Rationale  
Operator Training—Model Aquatic Health Code Recommendations and Rationale  
Reducing Trihalomethane and Chloramines in Pools  
National Drowning Prevention Alliance Symposium 2010-2012  
Immunization for Drowning Prevention--The Public Health Approach to Save Lives in Asia and the USA  
What Child Death Review Teams Can Tell Us about Drownings  
Asking the Right Questions: The Final Step in Managing Aquatic Risk  
How to Create a Drowning Prevention Task Force in Your Area  
Risks Involving Bodies of Water and the Legal System  
Drowning Risk Panel-Prevention of Incidents and Litigation Perceptions and Reality  
CDC New Drowning Prevention Initiative  
Scientific Benefits of Early Swim Lessons for Babies, Water SMART Babies Prescription Plan  
Legislation: A Case for Change/Hannah's Foundation  
Northeast Pool & Spa Expo, 2000, 2005, 2012  
Pool Popping & Floating Liners  
Certified Diving Board Installer  
Amusement Industry Manufacturers & Suppliers International, 2009  
Managing Safe Behaviors in Aquatic Facilities  
Managing Critical Incidents  
Water Quality and Air Quality  
Lifeguard Consideration and Aquatic Facility Safety Concerns

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Confined Space Safety  
Pneumatics  
Advanced Hydraulics  
Developing Daily Inspection Programs  
Waterpark Attraction Inspection  
Standard Operating Procedures for Aquatics  
National Aquatic Industry Standards and Best Practices  
ASTM F-24, Standards update  
ASTM F-77-06a, Operations  
Amusement Industry Manufacturers & Suppliers International/International  
Association of Amusement Parks and Attractions, 2011  
Basic Safe Waterpark Operations  
Tips and Techniques for Inflatable Ride Inspections  
Inspections of an Aquatics Facility  
Operations Supervisory Advanced  
OSHA Top 10 Violations  
Human Engineering – Intro and Advanced  
Structuring a Waterpark Audit  
Amusement Ride Device and Inspection Program Development  
Measurement Basic  
Amusement Industry Best Practices, Roundtable Discussion  
Dynamic Ride Forces  
Managing Safe Behaviors in Operators  
Document Inspections Accurately  
Foam Padding & Restraints  
Inspection Beyond the Steel  
Legal Roundtable  
Aquatics Incident Investigation  
Engineering in the Amusement Industry  
OSHA – Lockout, Tagout  
Hot Topics and Industry Trends in Aquatics  
Codes, Standards and Inflatable Product Suppliers  
Does Adding Water Attractions Make Sense for Family Entertainment  
Centers (FEC's)?  
National Association of Amusement Ride Safety Officials  
Ride Safety Inspection Forum, 2007-2009; 2011  
Flumes/Rafts/Wave Pools  
Grounding & Bonding  
Electrical & Control System Troubleshooting  
Review of NEC 525  
Pneumatics/Pressure Vessels  
Braking Systems  
Euro Bungee & Similar Device Inspections

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Bungee Trampoline Devices  
Inflatable Device Operation & Inspection  
ASTM F-24 Updates  
Safety Restraints  
Components/Inspection Points  
Hydraulic System Maintenance & Oil Sampling  
Inspection Techniques/Incident Investigations  
Safe Inflatable Operators Training Organization  
Basic Inflatable Safety Operations  
Advanced Inflatable Safety Operations  
Pennsylvania Amusement Ride Safety Seminar, 2008-2009, 2011  
Entrapment Education Seminar, Accredited Education Program provided by the  
Association of Pool and Spa Professionals, Penn-Jersey Chapter, 2006  
Design Tips for Detention Ponds presented by GAE Engineering, 2006  
World Waterpark Resorts Leadership Development Conference, 2006-2007  
International Pool & Spa Expo, 2004, 2006, 2010  
Selecting proper main drain and pump  
Diagnosing hydraulic issues  
Selecting energy-efficient equipment  
Northeast Pool & Spa Expo, 2000, 2005  
United States Water Fitness Association Clinic, 2004, 2006  
National Recreation and Park Association Aquatic Conference, 2001, 2004, 2007  
Eastern States Coaches Conference, 1995, 1997, 1999  
United States Swimming Coaches Clinic, 1986-1997  
American Swim Coaches Association Educational Program, 1988-1997  
Department of Justice  
Accessible Pools: Means of Entry and Exit,  
Existing Pools under Title II of the ADA, 2012

## PROFESSIONAL MEMBERSHIPS

American Society for Testing and Materials  
Association of Pool & Spa Professionals  
National Association of Amusement Ride Safety Officials  
National Drowning Prevention Alliance  
National Recreation & Park Association  
National Swimming Pool Foundation  
Northeast Spa & Pool Association  
Professional Pool Operators of America  
United States Water Fitness Association  
World Waterpark Association

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**Sports and Recreation Expert**

## PROFESSIONAL COMMITTEES

ASTM International Technical Committee

F24 – Amusement Rides and Devices

F24.70 – Water Related Amusement Rides and Devices

Association of Pool and Spa Professionals/International Association of Plumbing and Mechanical Officials

APSP/IAPMO-17 Safety Vacuum Release Systems, Automatic Pump Shut-Off Systems, and Vacuum Limiting Systems for Swimming Pools, Spas, Wading Pools, Hot Tubs, and Catch Pools

Association of Pool and Spa Professionals

ANSI/APSP-7 Suction Entrapment Avoidance in Swimming Pools, Wading Pools, Spas, Hot Tubs and Catch Basins  
Technical Committee

Centers for Disease Control

Model Aquatic Health Code Risk Management/Safety Technical Committee

National Drowning Prevention Alliance

Policy & Codes Committee Chairperson

National Recreation and Park Association

Subject Matter Expert – AFO Job Analysis and Item Writing Group  
Aquatic Facility Operator Training—Curriculum Committee

Professional Pool Operators of America

Executive Board Member

United States Water Fitness Association

Editor – Instructor Training Manual, *Understanding the Mature Participant*

## SPEAKING ENGAGEMENTS

Pennsylvania Recreation and Park Society Conference

The Model Aquatic Health Code, ANSI Standards, International Swimming Pool and Spa Code and YOU

Risk Management--Protecting You, Your Facility, and the Bottom Line, Seven Springs, PA 2012

International Pool Spa Patio Expo & Conference, Selling Safety: Safer Pools/Spas = More Pools/Spas, Las Vegas, NV 2011

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- National Drowning Prevention Alliance, How New Barrier Codes Can Help You Effect Change, Colorado Springs, CO 2011
- National Drowning Prevention Alliance, Pool & Spa Safety Technician Pilot Training, Phoenix, AZ 2011
- Hospitality Law Conference, Managing Risk in Pools, Spas, and Workout Facilities, Houston, TX 2011
- Workers Injury Law & Advocacy Group, Annual Conference, Aquatics Exposure, Aventura, FL 2010
- Parks and Carnival Education Seminar, Water Quality for Waterparks, Lancaster, PA, 2008 & 2009
- National Recreation Facilities Institute, National Aquatic Institute. Aquatic Facility Operator training. NIRSA (National Intramural-Recreation Sports Association) Annual Conference, Baltimore, MD. October, 2009
- National Association of Amusement Ride Safety Officials, Recreational Water Quality & Disease Transmission Prevention, 2009 National Conference, Pigeon Forge, TN
- Building Codes for Aquatic Facilities. Lorman Education Services, Cherry Hill, NJ. 2009; Scranton, PA. 2008
- Parks and Carnival Education Seminar, Water Quality for Waterparks, Altoona, PA, 2008
- Sioux Falls Parks & Recreation Organization, Lifeguard Awareness Workshop, Sioux Falls, SD, 2008
- Pennsylvania Department of Agriculture, Pesticide Applicator Training, Wilkes-Barre, PA, 2008; Wyomissing, PA 2007-2009
- National Recreation and Park Association, Aquatic Facility Operator Training, Ashburn, VA, 2005-2010
- National Swimming Pool Foundation, Certified Pool Operator Training, Reading, PA 2005-2009
- The American Association for Justice, Water Hazards at Resort Waterparks, Chicago, IL, 2007
- National Aquatic Conference, Aquatic Facility Operator Instructor Training, Atlanta, GA, 2007
- Athletic Business Conference and Expo, Aquatic Facility Operator Training, Orlando, FL, 2004

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### SPORTS AND RECREATION EXPERIENCE

- As Subject Matter Expert for the National Recreation & Park Association, developed Aquatic Facility Operator Job Analysis & Certification Exam.
- Served on design and evaluation committees tasked with new construction and renovation of buildings and grounds used for sports and recreation activities.
- Served on oversight committees during new construction and renovation of buildings and grounds used for sports and recreation activities.
- Pre-inspected, bid, organized and managed crews, provided safety training and oversight, and performed final inspection on post-renovation and construction of commercial facilities.
- Developed, initiated, and monitored dynamic programmatic content for sports and recreation activities.
- Inspected sports and recreation facilities for safety, including proper equipment selection, equipment placement and operation, equipment and facility maintenance, warning signage selection and placement.
- Designed facility specific warning signage.
- Developed and implemented Emergency Evacuation procedures for sports and recreation facilities.
- Directed various event planning, patron safety, and staff management teams.
- Actively participated in planning, operations, and oversight committees for recreation, athletic, and non-athletic events.
- Inspected facilities and made safety recommendations.
- Inspected fitness equipment. Removed dangerous equipment from service until repair or replacement could be completed.
- Specified equipment to be purchased for facilities.
- Established guidelines and enforced compliance with proper fitness facility layout to provide for safe traffic flow and unobstructed use of equipment.
- Identified and eliminated hazardous conditions in recreation and non-recreation facilities.
- Recruited, hired, fired, and trained employees.

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### RISK MANAGEMENT EXPERIENCE

- Inspected facilities and resolved or removed hazards.
- Reviewed and revised safety procedures used at conferences, recreation, and sporting events. Trained and provided oversight and evaluation of employees who were implementing safety procedures.
- Developed Emergency Response training programs for large group functions. Trained and evaluated employees in proper application of Emergency Response procedures and protocol.
- Trained and evaluated employees in Emergency Evacuation procedures and protocol.
- Created documentation program for tracking employee training and development, facility safety and sanitation, and equipment inspections and maintenance.
- Worked with Health Departments, Departments of Agriculture, and Fire Marshalls to develop and implement proper chemical storage, use, handling and disposal procedures.
- Led teams responsible for event planning, patron safety, and staff management.
- Trained Advanced First Aid personnel in emergency response and triage procedures.
- Provided employee and patron training in proper and safe use of fitness equipment.
- Trained waterpark resort operators in specialized field of aquatic operation and hospitality guest satisfaction standards.
- Trained operators of aquatic facilities in traditional venues.
- Instructed private pool owners on proper safety procedures.
- Repaired and maintained mechanical operating systems.
- Replaced, repaired, and maintained chemical operating systems.

### COACHING EXPERIENCE

- Created, implemented, and evaluated cross-training programs for competitive athletes.
- Constructed and evaluated nutritional programs for competitive athletes.
- Taught strength training programs to recreational and competitive athletes.
- Provided Personal Training instruction and fitness and technique evaluations for recreational and competitive athletes.
- Designed and instructed self-defense classes for women and children.

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- Created motivation and tracking programs for participants in sports and recreation activities.
- Professionally coached competitive sports.
- Trained professional coaches of recreational and competitive athletes.
- Played on numerous teams and engaged in various sports competitions and recreational activities on land and in water.

### CHILD SUPERVISION EXPERIENCE

- Developed, implemented, and evaluated supervision programs for children at daycare centers.
- Instructed daycare staff in child safety measures including oversight of indoor and outdoor recreational activities.
- Created, taught, and evaluated age and skill appropriate activity programs for children.
- Devised and taught programs used to enhance awareness, creativity, and self-esteem in children and young adults.
- Originated and instructed mentoring program for parents of children involved in recreational and competitive activities.
- Planned, organized, and ran recreational and competitive sporting events for children.

### DIVER TRAINING EXPERIENCE

- Performed all responsibilities as Head Coach of high school swimming and diving teams, and USA swimming teams.
- Instructed participants on proper entry into pool from deck level, starting blocks, diving boards, and elevated platforms.
- Taught proper body position during dives and steering technique designed to prevent injury when entering water head first.
- Developed and coordinated physical and mental/psychological training.
- Tracked, evaluated and augmented athlete progression.
- Interfaced with state and local authorities and boards of directors to ensure proper training in a safe environment.

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### WATER QUALITY and DISEASE TRANSMISSION PREVENTION EXPERIENCE

- Performed all related responsibilities as instructor of Aquatic Facility Operator, Certified Pool Operator, and Pesticide Applicator Training programs.
- Taught courses to commercial swimming pool operators at municipalities, universities, colleges, public and private schools, YMCAs, hotel/motel and condominium/apartment complexes.
- Instructed private pool owners on proper operating procedures.
- Taught proper sanitation methods, water testing and balance, chemical treatment options, and proper dosing procedures to prevent disease transmission.
- Provided troubleshooting of water quality and mechanical problems.
- Taught plant operations, safety and risk management procedures.
- Resolved indoor air quality problems.
- Instructed pool operators on automation, system design considerations, and alternative sources of disinfection.
- Developed disease prevention programs for swimming pools, changing rooms and first aid stations.
- Interfaced with city officials, state/local authorities, and various boards of directors on water quality issues and facility safety.