

Canadian/British Citizen, DOB June 26, 1970, married (2 children)
 Languages: English (native), Russian (intermediate), Spanish (basic), French (basic)
 2710 North Upshur Street
 Arlington, VA, 22207
 703.357.5828
david@mygoodhelper.com | www.mygoodhelper.com



"In acknowledgement of outstanding ability & creativity in the areas of Science & Technology"

OBJECTIVE

Senior staff position within an organization where I can use my extensive international experience in **Business Development, Proposal Management, Quality Management Systems, Technology Innovation, and Project Management** for US Federal Agencies to **create strategic opportunities, develop innovative capabilities, and implement effective solutions** which make the world a better place to live.

I seek challenging opportunities that combine my passion for innovative solutions & my ability to bridge the gap between people, technology, & business where I can use my talents for technology and leadership to build capacity, deliver results, & produce value.

PROFILE

- Over **20 years of international experience** in **high-tech, public health, construction, security, & defense** industries
- Creative **Leadership** and **Visioning** ability combined with technical know-how (concept through to marketing)
- Demonstrated successes at **building capacity, developing programs/businesses, and delivering solutions (PM)**
- Multi-faceted Business Development Guru:** Internal Capacity Building, Marketing, Sales Engineering, Presentations, Proposal Development, Client Relations
- Worked with **foreign governments, ministries, and NGOs** throughout America, Canada, Russia/FSU, and Central Asia
- Extensive experience and expertise in all areas of **hi-tech systems/software development, integration & deployment**
- Up-to-date knowledge and experience with **Systems Engineering & Integration (SE&I)** within the DoD Acquisition Lifecycle framework
- Always a **visionary and leader in the high tech field**, was creating integrated, distributed databases and handheld data collection systems 15 years ago
- Accomplished and professional communicator** whose clear message is easily understood by a diverse audience
- Experienced Project Manager** consistently executing contracts **under budget, ahead of schedule, with extra benefits to valued customers** (300+ satisfied customers, budgets up to \$5 Million)
- Demonstrated ability to quickly understand & **adapt to new cultures & languages** (5 years in Russia), managed **multi-disciplinary, multi-cultural** team sizes up to 30
- Inventor with provisional patent:** Mobile BioDetector
- Had an early start on the path to **innovation and success** inventing true 3D video multiplexing at the age of 16.
- Was recognized in 1986 as **one of the top 14 young scientists across Canada** and was awarded the Canadian Award of Excellence
- Winner of Dean's Entrance scholarship for **top engineering student** entering the University of Victoria
- Received B.C. Provincial Scholarship 1988 (#1 ranking BC Physics, **13th in Canada** on Waterloo Math exams)
- Gold, Silver, Gold medals Canada-Wide Science Fair** (top engineering project in Canada) 1984-86
- Committed to helping others in our local communities
- Professional & Personal life dedicated to **"Love & Service"**

EDUCATION

- Project Management Professional (PMP) – in progress
- DoD Systems Acquisition Management & Systems Engineering, EVMS, Defense Acquisition University, 2009
- Peace, Conflict, & Development**, United Nations University for Peace in Costa Rica, 2008
- Russian as a Foreign Language, Linden & Denz, 2007
- Leadership Victoria (by invitation), Grad 2003
- University of Victoria: Deans' Entrance Scholarship for top student, Electrical Engineering (3 years), 1991
- St. Michaels University School: Provincial Scholarship, 1988

ACHIEVEMENTS

- 2013 Pyramid Award winner** for business development
- Designed, developed and deployed a **unique Global Supply Chain and Personnel Logistics Management System** CTRLIS.net). www.ctrlis.net
- Contributed significantly to proposals which **resulted in over \$350M dollars of new business** for URS
- Proposal Manager for **DTRA's China COE** project which was awarded to URS in Sep 2011. Key member of the project team; wrote whitepaper which kept project alive.
- Created, and Managed **Quality Management System for URS** –145 standardized Project Execution Procedures (PXPs); adapted for International projects w/ translation into local language for HCN employees
- www.ursfsi.com – lead the design, development, and implementation; markets URS TR&S SBU (multi-lingual).
- Technical Lead for URS BioTeam** who's BTRIC proposal resulted in URS being awarded a DTRA (DoD) base contract (5-10 year ID/IQ) as 1 of 5 contractors (**est. value: 10-100M**).
- Led the design, development, and implementation of DTRA's bio-Surveillance Systems** throughout Russia/FSU (now deployed to 7+ countries). Grew a team of 3 students into a fully functioning business unit with 35 members in under 3 years, winning a USG Sole Source **Contract worth over 60+ Million dollars employing 90+ FTEs currently.**
- Inventor** (with provisional patent) of the URS *DetectIT Mobile BioDetector*: Field Deployable Solution for Rapidly Detecting Infectious Agents and Transmitting Standardized (HL7) Results in Real-Time. Presenter at the 14th International Biotechnologies Conference in Baltimore
- Developed several **strategic whitepapers for US Govt:** Safeguarding PII, Biotdetector, BioRisk Training Program, TADR Russia; Contributed to 10+ USG proposals (SE/IT SME).
- Commercial BD activities** in Russia resulted in the Russian Power Industry changing their procurement contract type from Firm Fixed Price (FFP) to Target Price.
- Established and operated **BEYOND Computer Services for 12 years**, serving over **250 clients** throughout **Western Canada** and the **United States**. <http://www.mygoodhelper.com>
- Was requested by the US OSD policymakers to **create and deliver high-impact presentations** to numerous US and International agencies which resulted in positive outcomes and furthered the USG's Global Health & Security initiatives.
- Demonstrated a personal commitment to **Social Responsibility** by: volunteering at hospitals/orphanages in **Russia and Georgia**; envisioning, funding, and embarking on a mission to help an orphanage in **Burundi, Africa**; creating and funding a Micro-Agriculture project **"we help ourselves"**. <http://www.mygoodhelper.com/caring.html>



KEY SKILLS & ABILITIES

Leadership & Strategic Visioning

Building Capacity and Creating Growth

- Core Values: Integrity, Quality, Productivity, Reliability, Commitment - Bold, Decisive, Flexible, Supportive, & Faithful
- Utilize a Servant Leadership Model: creating and developing encouraging, supportive, respectful, equality-based, participatory, joyful, motivating environments for teams
- Actively engage in team competency building: resource mentoring & technical capability building
- Deliver High-Impact Presentations which engage, enthuse, and motivate audiences in multiple languages simultaneously; communicating complex concepts in accessible terms
- Possess an intuitive grasp of personal & cultural nuances vital to building long-term, trust-based relationships with senior decision makers within foreign government ministries & NGOs
- Effective leader of Collaborative Strategic/Business Planning Sessions aligning the corporate/program mission, vision, values & goals
- Management Consulting: assessing current business processes/needs & developing long-term, scalable solutions - bridging the gap between people, business, & technology
- Adept at performing complex Risk Assessments throughout the lifecycle of Businesses, Programs, & Projects - proactively implementing long-term solutions which produce growth

Business Development

Creating Dynamic Business Opportunities

- Expert at collaboratively developing Bus. & Marketing Plans
- Focused on Client Relationship Management: always intently listening to hear customers needs while remaining open to hear constructive criticism - engaging and encouraging customers to actively participate in the solution creating and decision making process
- Adept at Business Forecasting & performing detailed Market Assessments to help position products and services within global expanding markets
- Proficient at conducting dedicated research & learning what global standards, industry trends, emerging technologies, and best practices can be leveraged to help reduce risk & cost, build capacity, and improve the efficiency & quality of company/program products and services
- Experienced Proposal Writer for complex projects: created set of tools enabling business to quickly, accurately, and cost-effectively bid on new potential contracts
- Skilled at preparing accurate and Standardized Rough Order of Magnitudes (ROMs): WBS (Hours/Costs), WEPs
- Good at writing concise, low-risk, standardized Statements of Work (SOW) which are used as the basis of contract negotiations and implementation plans

Systems/Software Development: *Developing Innovative Capabilities*

- Extensive experience in all phases of System/Software Development Lifecycle for international, multi-disciplinary, cross-agency, projects as a Senior Systems/Software Developer/Architect (Microsoft Visual Studio Platform)
- Globalized/Localized Product Design & Development
- Software Development Technical Solutions & Best Practices: Rational Unified Process (RUP), Microsoft Solutions Framework (MSF), MIL / IEEE System Dev. Standards
- Customer/End-User Needs & Business Process Analysis
- Product Features Requirements Definition: driving shared project vision/scope between stakeholders, end-users, and software development team
- System/Software Design & Database Modeling
- Prototyping, Reqs/Design Refinement, & Software Demos
- Software Development: MS Visual Studio .NET platform, distributed/replicated database systems, mobile technologies, web development, barcode/RFID, GIS, Crystal Reports
- Product/System Testing and QC/QA (Seapine TestTrack Pro)
- Product/System Documentation: Stakeholder Requests, Vision Docs, System/Software Req. Specs., System/Software Design Descr., System/Software Test Plans, Acceptance Test Plans, User Documentation, SOPs, Deployment Guides
- Software Deployment/Installation: Creation of Installation packages & Manuals (InstallShield)
- Product/System Training (including creation of complete training modules & related materials)
- Product/System Change Management
- Product Support Management: Service Level Agreements, Hardware/Software/End-User Technical Support, Helpline, Problem Resolution & Tracking
- Local/Wide Area Networks: Design, Procurement, Installation, Support (Microsoft platform)
- Barcode/RFID Systems: Custom design, programming, installation, training, and support of data entry and tracking systems. Installation base includes: International Government Programs, Municipalities, Passenger Rail, Doctors, Lawyers, Accountants, and Hospitals
- Geographic Information System (GIS): international experience with world mapping solutions integrated into business applications (ESRI arcGIS, mapObjects)
- Internet/Website Design, Development & Promotion
- Graphic Design/Marketing: High-end corporate and business graphics and presentations. Proposals, Whitepapers, Brochures, Presentations, CD-ROMs

Program/Project Management

Implementing Effective Solutions

- Excellent ability to manage multi-country, multi-language programs comprised of remote teams collaboratively developing, implementing, and supporting technical solutions for foreign governments, ministries, & NGOs
- Highly skilled at development, monitoring & control of Standardized Implementation & Work Execution Plans for rapidly & cost-effectively deploying technical capabilities
- Liaison with stakeholders, system development, technical services and operational areas at a senior level during the course of the implementation cycle
- Possess strong analytical skills which enable anticipation of potential risks & problem areas in advance in order to create proactive, long-term solutions that work.
- Experienced with sub-contract negotiations and management of sub-contractors
- Procurement & Logistics: Computer Hardware & software specifications, vendor relationships, shipping/receiving, inventory control/management
- Skilled at creating site-specific Standard Operating Procedures (SOPs) for ensuring successful adoption of new technology & Operations & Support Plans

Administration & Office Management

Ensuring Successful Operations

- As a former business owner understand what it means to run an office as a small business.
- Have been a Director or Managing Partner in several mid-size companies during my career.
- Proficient with Corporate Financial Records/Accounting: budgets, profit/loss, cash flow, revenue/expenses, client billing/invoicing, receivables, etc.
- Understanding of International Taxation Issues and their impact on earned value, including knowledge of international taxation issues
- Office Leases & Office equipment purchases
- Sub-Contract negotiations and execution
- Computer Equipment Procurements, Network Installations, Diagnostics and Repairs
- Hardware/Software/End User Technical Support
- Human Resources Management: hiring/personnel selection, professional development/mentoring, supervising, and reviewing
- Logistics Management for project teams



REPRESENTATIVE PROJECTS

URS Corporation 2007-present

Capture/Proposal Management on CBRNE Opportunities: Manage the proposal team and all activities in the proposal process of large, complex federal government bids from RFP/IFQ release to contract award. Coordinates proposal efforts across URS SBUs, teaming partners, subcontractors, contracts, legal, tax, procurement, cost estimating, technical writers/SMEs, HR, and BD procedural compliance while ensuring proposals are in accordance with FARs. Research, develop, and deliver multi-divisional, multi-company responses to USG Requests for Information (RFIs).

Results: Since 2011 contributed significantly to proposals which resulted in over \$350M dollars of new business for TR&S. Managed NASA RLLS, PEACE ICQ, CBEP IIB Armenia, CTR Logistics Support proposals. Developed several RFI's for opportunities (DHS, NASA, DTRA, etc.). Developed strategic whitepaper for DTRA CTR contract "Potential solution for protecting PII" which received positive (informal) feedback from client. Developed strategy whitepaper for DTRA's China COE project "Early Training Approach" which kept the contract alive for URS.

CIT Support & Technology Innovation: Create Innovative IT Solutions that supports URS GSG services delivered to Federal clients. Develop and deliver strategic whitepapers providing potential solutions to USG clients highlighting URS' IT capabilities. Liaise with URS SEIS (Apttis) on future CBRNE IT opportunities. Responsible for overseeing Host Country National (HCN) IT Specialists to ensure compliance with corporate IT policies. Provide International PM's with IT support. Provide IT (and SE) Subject Matter Expertise input on all proposals. Create custom demo websites tailored for each proposal to demonstrate innovative use of technology.

Results: Developed with SEIS a strategic whitepaper for the DTRA CTR contract 'Potential solution for protecting PII' which received positive (informal) feedback from client. Developed concept for CTRLIS.net and managed the development of system pre-Award (400K IT CAPEX). Oversaw HCN IT specialists for SATC-X, NWTS, SS-25 projects in Russia, SS-24 (Ukraine), and WMDPPP Georgia ensuring email and IT systems comply with corporate policies -- 99.9% up-time achieved. Provided support for all new hires (IT equipment and intranet access provisioning). Created custom websites for selected proposals (ie. BTRIC/CTRIC). Contributed to all proposals in 2012 on IT components.

Create and Manage Quality Management Systems (PXP's): Oversee the design, development, implementation and maintenance of a secure project portal for International program-wide and project-specific PXP's. Lead the project-specific adaptations for all International projects. Support activities involving compliance with applicable regulatory and Quality Management System requirements. Coordinate the harmonization of legacy WGI OPs, PEPs, and EG&G Policies into a program-wide set of Project Execution Procedures (PXP's) tailored for DTRA CTRIC/BTRIC contracts including client briefings.

Results: Updated Safety and Property PXP's and ensured all CTRIC/BTRIC projects adopted. Facilitated SS-24 (Ukraine), NWTS, SATC-X, and WMDPPP Azerbaijan had project-specific PXP's. Developed Property Management briefing that was delivered to DTRA/DCMA and was positively received.

Project Management: Responsible for operational support to OCONUS PM for DTRA's China Nuclear Center of Excellence project. Proposed as IT lead for DTRA's CTR Logistics contract. Lead the development of CTRLIS.net (400K IT CAPEX project).

Results: Developed key CDRLS: Value Added Tax Exemption Processing Approach (VATEPA), PMP, and Training Plan. Developed strategy whitepaper for DTRA's China COE project 'Early Training Approach' which kept the contract alive for URS. Managing 400K IT CAPEX development of CTRLIS with SEIS, HAL, and Neogic - a Cloud-based Global Supply Chain and Personnel Logistics Management solution for DTRA CTR Logistics Support contract (if we win) and possible re-use by other parts of URS.

Inter-Divisional Collaboration: Manages a complex mix of URS cross-divisional resources (ie. SEIS and Scott Wilson), teammates (Culmen, HHS Barda, DAI, Merrick, CUBRC, Gregg, Control Risks, etc), subcontractors (Neogic, HAL etc.) and URS GSG/TRS personnel (ie. contracts, legal, procurement, estimating, production, etc.) His ability to multi-task and meet demanding proposal and project deadlines is key to his success. Works effectively across URS divisions starting with RFI responses, through proposal efforts, and into implementation after project award. Manages to get key SMEs to provide input during proposals and can discuss technical issues at depth on a range of subjects. Develops and presents dynamic and effective presentations (ie. Property Management presentation to DTRA/DCMA). Manages teaming partners and sub-contractors extremely well -- ensuring key relationships are built and maintained to ensure URS is getting maximum value from teammates and subs (ie. Neogic, Merrick, DAI, etc.). Communicates professionally with senior management and uses his strong analytical skills during discussions to add value -- he is always an active participant. Works well with HCNs overseas and ensures his phone is answered 24x7 given the time difference.

Results: 360° Assessment completed during URS' 2013 Leadership Project showed Supervisors, colleagues, and subordinates valued the collaborative techniques employed. Recognized for exemplary performance in 2012 by being granted enrollment in the discretionary bonus plan (and renewed in 2013). Pyramid Award winner 2013.

Note: Project listed below were completed while working for **Black & Veatch (2004-2007)** and **URS Corporation (2007-present)**.

US Department of Defense (DoD) Global Health & Security Programs, Electronic Integrated Diseases Surveillance System (EIDSS) - Russia, Georgia, Uzbekistan, Kazakhstan (2004-2007), Software Development Manager

As Software Development Manager for Black & Veatch Corporation I led the design, development, and implementation of US DoD bio-Surveillance Systems throughout Georgia, Uzbekistan, Kazakhstan, and Russia with hands-on throughout the entire system/software development lifecycle.

I collaborated with foreign ministries, institute officials, CDC and other global experts developing an electronic integrated human and animal disease surveillance that was compatible with WHO and OIE reporting requirements (IHR 2005), was adaptable to recipient-state rules and regulations, and could be cost-effectively deployed to resource poor regions. In addition, I have successfully worked with teams of local nationals to ensure that local recipient state staff were fully trained on the requirements needed to operate, maintain, and sustain the systems.

The Electronic Integrated Disease Surveillance System (EIDSS) links together the three levels of a national disease surveillance network within a country providing near real time information flow that can be then disseminated to the appropriate organizations in a timely manner. EIDSS integrates the human and veterinary case data collection, demographic information, geographical information, disease-specific clinical signs and symptoms (based on standardized case definitions), laboratory analysis, sample tracking, epidemiological analysis, and response measures into a cohesive information set that is continuously synchronized among all EIDSS sites. The information is securely stored in the databases, and is available for historical data analysis. EIDSS is fully multi-lingual application new languages can easily be added & scientific nomenclature edited. As it is based on the former paper-based reporting system it requires minimal changes to legislation which eases the adoption of this new technology.

My on-the-ground BTRP experience collaborating with dozens of institutes in Russia/FSU on the requirements, design, and implementation of a network of laboratories will prove extremely useful to Health projects as I will be able to suggest alternative solutions and provide lessons learned from enhancing public/animal health networks in other regions.

Responsibilities and Accomplishments:

- Led the formation & development of a product-based business unit within Black & Veatch, managing the life of BV Software Products (concept->market), consolidating BV's position as a global leader in: Disease Surveillance, Laboratory Management, biosecurity & Geographic Information Systems
- Grew a team of 3 students into a fully functioning business unit with 35 members in under 3 years, winning a DTRA Sole Source Contract worth over 40 Million dollars, working daily with the software development team to develop their skills/build capacity
- Conceptualized and realized a shared vision for Black & Veatch's Global Software Product Portfolio: the Electronic Integration Disease Surveillance System (EIDSS) and the Pathogen Asset Control System (PACS) in alignment with the business development strategy by providing leadership, technical guidance, mentoring and hands-on assistance throughout the entire Software Development Lifecycle (SDLC)
- Traveled throughout Central Asia & Russia conducting consultations to create a common ground, built consensus, and a shared vision - delivering high-impact presentations, conducting Joint Requirement Discussions (JRDs) with end-users, Institute Management and project stakeholders to accurately define system requirements and proper configuration parameters for successfully implementing and sustaining EIDSS and PACS, building long-term, trust-based relationships with senior decision makers within foreign govt. ministries & NGOs
- Established Requirements/Change Management process, capturing user/stakeholders feedback from EIDSS & PACS, implementing QC/QA processes, testing all releases of EIDSS & PACS and provided feedback to project team.
- Created Multi-language Documentation (Deployment guides, User Manuals, SOPs, Training Material, SRS, SDD, Ops & Support)

Results: By 2007 EIDSS had reached a product maturity stage where it had a dedicated DTRA CIT team who oversaw the requirements management and configuration control board. In essence, EIDSS had a life of its own. EIDSS & PACS passed Government Acceptance Testing (GAT) are now being deployed to over 7 countries with hundreds of end-users trained to-date.

US Department of Defense (DoD) Global Health & Security Programs, Pathogen Asset Control System (PACS) – Russia, Georgia, Uzbekistan, Kazakhstan, USA, Project Lead (PM)

The Pathogen Asset Control System (PACS) is a custom-designed computer-based inventory control system for highly dangerous pathogen stored in secure repositories in Russia and the Former Soviet Union.

Directed by DTRA to design, develop, and implement a specialty security system for pathogen repositories in Russia/FSU I utilized a systems engineering approach which resulted in a one-of-a-kind solution – the Pathogen Asset Control System (PACS). My collaborative approach and ability to manage multi-cultural, multi-disciplinary teams were keys to success due to the diversity of stakeholders – from 65+ year old institute personnel in aging labs to forward leading security specialists within the US DoD.

I established the blueprint for successfully implementing PACS at an institute, tailoring PACS to comply with Former Soviet Union Rules & Regulations along with site-specific Standard Operating Procedures.

The major technical and management tasks performed under my direction were (from inception through to implementation):

- DTRA Requests 'accounting system for EDPs' - September 2004
- Conducted Joint Requirements Development (JRD) with Recipient-State (RS) institutes, DTRA/TRSC, & Subject Matter Experts
- Analyzed 'AS-IS' Recipient State (RS) Business Processes (BPs) and State Regulations and developed a roadmap to the desired 'TO-BE' end state.
- Developed a concept for PACS that would: achieve DTRA's objectives, operate within the RS Business Processes, comply with State Regulations, and be adopted by the RS long-term

- Designed and Developed a Functional Prototype for PACS, demonstrated to stakeholders and verified system met US needs and would be adopted by RS – December 2004
- Developed PACS Beta, training material, and implemented at NCDC, Georgia – March 2005
- Implemented PACS at several other sites in UZ, KZ, and Russia – 2005 through to 2007
- Developed Blueprint for Implementing PACS with institute-specific Standard Operating Procedures (SOPs). Results: Golitsino adopted PACS, catalogued 1,000+ strains – 2005-2006
- Vladimir (ARRIAH) – using a SE approach tailored PACS to meet institute’s requirements and conform to RF State Regulations while complying with DTRA’s policy and guidance. Resulted in ARRIAH adopting PACS, RF MoA certifying PACS for use in Russia, and led to Institute Director’s endorsement of the EIDSS proof-of-concept project and TADR prototype in Russia - 2006 through to present (developed TADR Russia whitepaper)

Results: Golitsino, Russia: 20+ institute personnel trained and 1000+ previously unaccounted strains from 6 collections were barcode labelled and catalogued. Vladimir, Russia: 25+ institute personnel trained, implemented a secure network configuration for PACS which allows Institute Director to monitor 6 collections from his desk. Institute Management adopted PACS as their pathogen accounting system. PACS certified for use in RF. Uzbekistan, Kazakhstan, and Georgia central Biocontainment facilities have adopted PACS as their main security and pathogen accounting system.

URS DetectIT™ Mobile BioDetector: Field Deployable Solution for Rapidly Detecting Diseases and Transmitting Standardized (HL7) Results in Real-Time - USA, Russia | UK, Project Lead (PM)

NOTE: I have included a detailed description of this recent project due to its relevance to Health IT emerging markets. This project is essentially a multi-tiered mobile point-of-care system for limited resource settings and highlights my core competencies: **innovation**, **technical know-how**, and **bold leadership**.

The Mobile BioDetector solution demonstrates innovative approaches to Health Information Management in low resource settings and incorporates lessons learned during my 5+ years developing disease surveillance and security systems for lab networks in Russia and Former Soviet Union countries.

Inventor on record (provisional patent pending) of this innovative point-of-care solution for health care providers and veterinarians I developed the internal business case, development plan/costs/schedule, and successfully briefed senior management on the potential market value obtaining buy-in. The rapid development of a fully functional prototype required leading a joint venture between our UK partner, our US-based company, and our software development team in Moscow, Russia. All aspects of the project were under my direction: technical requirements/design/development, project cost/schedule/risk management, marketing material creation (brochures, website, whitepaper, presentations), culminating in a speaking engagement at the 14th International Biotechnologies Conference Baltimore, MD (June 25-26, 2009) which received many accolades.

I led the rapid development of the URS DetectIT Mobile BioDetector from concept through to marketing – combining creativity with technical know-how:

- Invented overall concept (provisional patent pending) / business case for internal URS briefings along with detailed Cost Estimate
- Developed and implemented software development plan (requirements, design, develop, integrate, test/debug) – managing 2 programmers and 1 consultant in UK (small biotech). Complex integration issues which involved: mobile platform, data acquisition/integration with biochip reader, GPS coding, barcode printing/scanner, and 2-way data exchange between 3 components (Lab Client, Web Client, and mobile app)
- Developed Issues Management Log and led weekly status meetings to keep all stakeholders on track and in sync (CONUS, UK biotech, and Moscow/St. Petersburg programmers)
- Developed and Implemented bi-weekly Cost Reporting (variance reports) to ensure budget was managed effectively
- Developed much of the concept and content for: brochure, presentation, whitepaper, website
- Delivered live demonstration at the biotechnologies conference in Baltimore; resulted in numerous inquiries and positive feedback

Results: In short, Delivered a leading-edge innovate technology that is well positioned within the emerging health/medical market.

The *DetectIT Mobile BioDetector* has been created to provide a field-deployable solution that rapidly, sensitively (10-20fmol) and accurately detects the presence of an infectious agent, antigen, nucleic acid, toxin or environmental contaminant and reports the information via Health Level 7 (HL7) messaging format to the relevant authorities in real-time. The solution utilizes a nanotechnology-enabled detection platform (Silicon Nanowire, SiNW) coupled to a secure global communications technology that can interface with existing disease surveillance, hospital information, emergency response and laboratory information management systems. DetectIT™ will provide medical and veterinary professionals, emergency responders, military personnel, border control, food/water safety inspectors and others with the ability to expand their reach into the field.

The *DetectIT Mobile BioDetector* solution is comprised of 4 separate but integrated software components, tailored to different roles and physical locations of the point-of-care team member:

1. Mobile BioDetector Handheld Computer Application (Windows Mobile Application)

A .NET 3.5 Compact Framework WinForms application, utilizing Microsoft SQL Server Compact 3.5 for local data storage, and Microsoft Synchronization Services 1.0 for data synchronization. Hardware specific libraries (Motorola Symbol) are used for scanning and printing, built-in GPS receiver accessed by serial port. Health Level 7 (HL7) messages (v 2.5 OUL^R22) are sent over TCP/IP link (internet). The application User Interface is fully localizable enabling multi-language data entry and retrieval. Main Features: View Disease Events, Collect Samples, Detect Pathogens, Report Results

2. Mobile BioDetector Lab Client Component (Windows Application)

Is a primary data management tool, providing lab personnel with navigation on disease events data, including test subjects, samples, tests, accessioning returned samples and entering calibration data for BioChips. HL7 messaging is included in LabClient as well for transmitting follow-up Lab Test results to authorized partners

3. **Mobile BioDetector Web Client Component** (Web Application)

Provides read-only web interface to view collected data and enables authorized users with easy navigation, and graphical representation of collected data. The Web Client is implemented as an ASP.NET 3.5 application, connected to central database. GoogleMaps API is used to pinpoint data collection sites on the interactive map. Server-side synchronization endpoint is implemented as SOAP web service included in Web Client application.

4. **Silicon Nanowire (SiNW) Data Acquisition (DAQ)** Module (Labview mobile application)

Acquires and processes data from the SiNW reader. For the prototype the SiNW DAQ runs on an iPAQ PDA connected to the SiNW biochip reader. It enables a user in the 'dirty zone' to perform tests using the SiNW reader and display the data/graph.

This information is automatically saved on the iPAQ then imported into the DetectIT database on the Motorola MC75 in the 'clean zone' via File Transfer Protocol (FTP) over a Wi-Fi or Bluetooth connection. The test results along with GPS coordinates are then transmitted in real-time to the Lab Client directly or to authorized partners using the Health Level 7 (HL7) messaging format for Laboratory Test Results (v 2.5 OUL^R22).

The *DetectIT™ Mobile BioDetector* interfaces with existing Global/National/State Disease Surveillance, Hospital Information, Emergency Preparedness and Response, and National/Provincial/Local Laboratory Information Systems. Data Exchange In order to provide seamless interoperability with Global/National/State IT systems DetectIT™ incorporates Health Level 7 (HL7) messaging (v 2.5 OUL^R22). The Point-of-Care/Response Teams will send HL7 compliant Test Result messages from the mobile computer in real-time to Provincial Labs and National/Global Centers. Provincial Labs will send HL7 follow-up Test Result messages from their existing LIMS or via the DetectIT™ Lab Client component in real-time to National/Global Centers.

Integrated Medical Information System (IMIS) – Canada, Technical Lead

I was contracted as a Medical Information Systems Subject Matter Expert (SME) by a group of Doctors in Victoria, BC to perform requirements analysis, preliminary design, and prototyping for an Electronic Medical Record (EMR) system based on CDC's Public Health Conceptual Data Model (PHCDM) and ongoing Electronic Health Record (EHR) initiatives in British Columbia. The goal was to create a system that would allow Doctors in Canada/USA to replace their existing paper-based patient record system with a fully electronic system thereby improving accuracy and efficiency and reducing cost. I interviewed over 30 Doctors, Specialists, Nurses, Administrative staff, and Hospital workers to determine the standard Business Processes involved with EMR. I created the preliminary system design, database model, and web-based interface which was successfully demonstrated to the group of doctors. The results and lessons learned from this in-depth analysis can be directly applied to EHR/EMR system implementation in the USA.

Evaluation of the Victoria Health Project, Canada

I acted as the technical lead, establishing information systems for collecting and analyzing data during a 4 year in depth evaluation of this project aimed at improving the service delivery for aging patients in Victoria, BC. Resulted in a Unified Treatment Tracking System for healthcare service providers - a large scale, multi-agency system that spanned over 14 health care agencies. I performed an in-depth process analysis, and system needs analysis in order to better serve the client's needs. A centralized database was created along with handheld, portable patient treatment delivery tracking devices at each of the remote agencies. These devices tracked patient/treatment activity throughout the day. At night the central computer would dial out to each of the 14 remote agencies – downloading the patient treatment data. As this project was over 15 years ago, it demonstrates my vision, innovation, and creativity in regards to providing tools for health projects and information management solutions.

Integrated Health Information Management System, Canada

I led the evaluation and re-design of a completely integrated Health Information Management System for the Thunder Bay Health Unit. Eight government systems were combined to form HUIS. I was responsible for business, technical and systems analysis of existing systems, data modeling, normalizing, and analyzing the data design, and program interfaces. Understanding the clients' processes, systems, and business needs and coming up with an integrated, comprehensive system design was key to success in this project. The same strong analytical skills and understanding of integrated health systems will be applied to new projects.

Health Care System Medical Records Manager, Canada

Formally known as the MediTrak, I was responsible for product concept, research, design, deployment, and support. I surveyed over 100 health care professionals as to their information management issues. I performed various business, process, cost-benefit, and system requirements analysis. Throughout this venture I gained in-depth knowledge of the Ministry of Health's requirements regarding patient treatment tracking and billing.

Immunization Management System, Canada

I evaluated the City of Richmond Health Department's Immunization Management System and made recommendations for a more cost-effective program delivery. After reviewing the clients' needs for improved efficiency, lower costs, and more accuracy in tracking their patient immunization records I designed and developed a portable, integrated, paperless system that utilizes barcodes as the most efficient data entry technique. Lessons learned from this project will be applied to any new project.

Patient Audit Tracking and Management System, Canada

I evaluated the Kootenay Lake District Hospital's Patient Audit Tracking and Management System and made recommendations for a more cost-effective program delivery. After performing the business and process analysis and defining systems specifications a system was design which utilized barcodes and portable, handheld data entry devices to track patient treatment histories. The system provided the client with a cost effective, efficient way to enter patient questionnaires and assessments as well.

Nuclear Threat Initiative (NTI) Avian Influenza Pilot Project, Russia

From 2006-2007 NTI was tasked with developing a strategy for implementing a *Proof-of-Concept Veterinary Surveillance System* in a selected region in Southern Russia. NTI were directed by OSD Policy to work with me on developing the project concept with participating institutes. My on-the-ground experience and technical expertise allowed me to develop the relationships with key Russian institutes and collaboratively develop the project plan. Field trips, assessments, and project development discussions were conducted. A detailed project proposal with scope of work, costs, and schedule was prepared by me and submitted for review by NTI's board. Eventually, NTI handed over the lead of this project to US DoD.

US DoD Global Health and Security Programs in Russia

Following on from my work with NTI, I continued to work with project donors and the RF MoA developing a pilot project related to the surveillance of Avian Influenza (AI) in Central/Southern Russia. I consult with donors providing my expert opinion and lessons learned from implementing similar projects throughout the Former Soviet Union. My technical background and extensive international experience in the Global Health and Security sector enables me to engage participating agencies in depth.

In addition, I led the design, development and implementation of an innovative security solution, the Pathogen Asset Control System (PACS). I established the blueprint for successfully implementing PACS at any biocontainment facility, tailoring PACS to comply with RF Rules & Regulations along with site-specific Standard Operating Procedures. I worked with DTRA and RF agencies to develop a Concept of Operations (CONOPS) which would meet the institute's needs without conflicting with US or RF policy. I directed the successful implementation of PACS at numerous sites within the Former Soviet Union, cataloguing 1,000's of especially dangerous pathogens that were previously unaccounted for. In addition, I created and delivered PACS presentations and briefings to several partner states, in particular the *Canadian Global Partnerships Program (GPP)*.

Global Health and Security Programs in Armenia

In preparation for an upcoming project I led several in-country assessment trips to Armenia. During these trips I have evaluated the country's Public and Animal Health systems. I have met with over 15 high-level stakeholders, a variety of donors, and visited over 15 laboratories. A key element of my work focused on evaluating the effectiveness of a various health projects in Armenia. In addition, I provide reports to potential donors on gaps in the national health information systems planning requiring additional funding along with project concepts that would cost-effectively fill these gaps.

Canadian Global Partnerships Program (GPP), Kyrgyz Republic

I was an invited speaker at both the Kyrgyz Republic National Disease Surveillance Workshop and the Central Asian Disease Surveillance Workshop by Canadian Foreign Affairs (Global Partnerships Program) & US Dept of State. I demonstrated successful integrated disease surveillance systems (Animal and Human) that he had developed and implemented throughout Central Asia. In addition, I participated in roundtable discussions aimed at evaluating and improving integration of donor projects and inter-agency coordination. I maintain good relations with GPP (last meeting in Ottawa summer 2008) and am preparing to lead the proposal effort for an upcoming project in Kyrgyz Republic. I maintain contact with the Canadian Food Inspection Agency, Lethbridge Laboratory.

BEYOND Computer Services

Victoria, BC, Canada (1992 – 2004)

Managing Partner/Principal Consultant

Owned/Operated this computer consulting company with over 250 satisfied clients throughout Western Canada and the United States during 12 years of operation helping clients to better manage the information and knowledge vital to their business:

- Management Consulting: assessing current business processes/needs and developing long-term, scalable solutions which bridge the gap between people, business, and technology
- IT Project Management: Leading large scale development & implementations of IT systems
- Systems/Software Development: creating tools uniquely matched to meet the clients' needs
- Computer Networks Design, Procurement, Installation, and Support
- 24 x 7 personal onsite technical support to local businesses and home users
- Website Design and Promotion

The following business opportunities are some of the many under my direction which were created, capabilities developed, and solutions implemented under budget, ahead of time, and with extra benefits to the customer:

- British Columbia Rail Passenger Services: *Integrated Client Transactions Management System*
- Victoria Health Project: *Unified Treatment Tracking System for Healthcare Service Providers*
- Thunder Bay Health Unit: *Health Unit Information System*
- Health Care System Delivery Agents (physicians, hospitals, etc.): *Medical Records Manager*
- City of Richmond Health Department: *Immunization Management System*
- Kootenay Lake District Hospital: *Patient Audit Tracking and Management System*
- Central Vancouver Island Health Region: *Unusual Incident Reporting System*
- Mulesa Management Company: *Interactive Customer Service Delivery System for the Internet*
- Internet/Website Design, Development & Promotion

ORCATEC

Victoria, BC, Canada (1999-2000)

Senior Developer/Team Lead

Systems analysis and development (including Team Lead), primarily as a Visual Basic/Visual FoxPro programmer. Demonstrated the ability to handle multiple projects and meet tight deadlines by putting in many extra hours in order to achieve goals and meet tight deadlines. Successfully Led System/Software Development for the following projects:

- U.S. Army Corp: *Recession Rate Analysis System*
- Yukon Housing Corporation: *Housing Operations Management System*
- PhatPhunk Records, Los Angeles: *Royalty Tracking and Management System*
- Lawyers: *EXACT for Lawyers System*
- Arthritis Society of Canada: *Grant Tracking and Management System*
- Arthritis Society of Canada: *Consultation and Rehabilitation Information System*
- Nanaimo Family Life: *SocialNet Case Management System*

Fundacion Promotora de Vivienda (FUPROVI)

San Jose, Costa Rica (1997)

Consultant

Participated in a 6 month volunteer project where I visited several project sites, performed assessments of the computer information systems being used and briefed management on my findings. I fell in love with Costa Rica and returned to study at the United Nations University for Peace in 2008.

Pacific Data Solutions
Managing Partner

Vancouver, BC, Canada (1990 – 1993)

PDS is a hardware vendor of barcode equipment, providing custom barcode solutions to their clients. I was sent in to understand the technical aspects of the clients' business and to come up with a prototype product that could be demonstrated to them. After complete process analysis and system requirements analysis we would program a complete system that included the hardware configuration, software programming, and onsite customer training and support.

Under my direction the following business opportunities were created, capabilities developed, and solutions implemented under budget, ahead of schedule, and with extra benefits to the customer:

- City of Richmond Engineering Department, *Traffic Signal Control System*
- City of Vancouver Engineering Department, *Traffic Meter Maintenance System*
- MacDonald Lewis Law Firm, *Custom built Lawyer Billing System*

Certified Management Accountants of BC
IT Manager

Vancouver, BC, Canada (1997-1998)

In addition to managing the daily operational IT needs of the office I led the system development of a *Member Records Management System*. I worked fulltime with the Society to assess their membership management needs, design database systems to meet these needs and perform the various functions associated with their services. Prepared and passed an innovative budget proposal "Bringing the Society into the 21st Century".

ORGANIZATIONS AND COMMUNITY SERVICE

- See <http://www.mygoodhelper.com/caring.html>
- Executive Director of St. Michaels University School Alumni Association
- American Chamber of Commerce IT Committee in Moscow, Russia
- Governmental Affairs Committee of the Greater Victoria Chamber of Commerce
- Microsoft Certified Product Specialist Network & MSDN
- Canadian Naval Reserves (honorable discharge 1989)
- Alumni of Leadership Victoria.
- **Moscow, Russia and Tbilisi, Georgia:** Volunteered at hospitals and rehabilitation centers; Volunteered at orphanages and detention centers and took groups of children to various theatrical performances; Sponsored several students through University
- **Burundi, Africa:** Envisioned, funded, and embarked on a mission to help an orphanage; Volunteered for 1 week at a Psycho-Neurological Hospital; Created and funded a Micro-Agriculture project "*we help ourselves*"
- **Victoria, BC, Canada:** Co-Founder of "Setting the Stage" – A Theatre-Media Fundraiser for Youth Outreach; Past Chairperson of a global non-profit "*helping people with substance abuse issues*" Co-Founder of EcoTourism International; Monthly speaking engagements at local high schools, retreat houses, churches, and other spiritual groups; Founder of *Spirithiker* "*enhancing our spiritual growth by sharing outdoor experiences with other people living a spiritual way of life.*"

REFERENCES

Customer testimonials, Supervisor & Co-worker reviews, and character references are contained within a separate document.