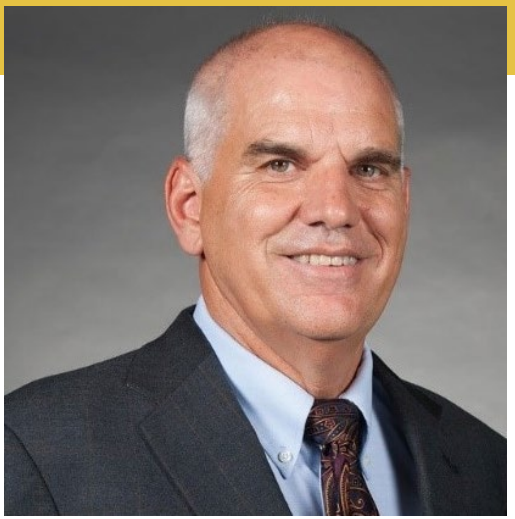
Researcher Spotlight

> **“CARFs provides researchers like me with seed money to work on novel forensic projects as well as a chance to assist various law enforcement agencies with important shorter projects.”**



Research Interests

- Development of procedures for forensic analysis including both chemical assays (trace analysis) and biochemical (forensic genomics)
- Chromatographic and electrophoretic methods for analysis of drugs and explosives
- Microfluidic and electrochemical sensing
- Spectroscopy and nanotechnology
- Biochemical forensic genetics
- Rapid PCR
- DNA extraction methods
- Epigenetics
- Microbial forensics

Capabilities

- Microbial forensics
- Epigenetics
- Rapid DNA/STR analysis
- Microfluidics
- Seized drug analysis
- Post-blast explosives analysis
- Toxicology
- Presumptive and fieldable detection
- Arson and explosives analysis

Advanced Instrumentation

- Pyrosequencing
- Digital PCR
- Quantitative PCR with high resolution
- Ultra-high speed PCR
- Ultra-high performance liquid chromatography
- Ion chromatography
- Capillary electrophoresis
- Electrochemical sensing
- Paper microfluidics
- UV/ fluorescence
- IR and Raman spectroscopy

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