

DAVID W. BOWER

B.S., Chemistry, University of Maryland, 1968 Ph.D., ABD, Analytical Chemistry, University of Maryland, 1974

Professional Positions

1982-Present President and CEO, Data Computer Corporation of America (DCCA), a 130-employee Information Technology Company. DCCA was formed to help the United States and foreign governments, commercial businesses and industries manage large, complex information technology projects that encompass many technological skills and management disciplines. These projects typically involve significant investments of capital and manpower; are carried out over an extended period of time; and require innovation, creativity and skill to succeed. DCCA focuses its skills and capabilities in each area to present our integrated approach to solving those management, technical, acquisition, development and implementation problems that are common or unique to any IT program or project. These areas include: Systems Engineering and Technical Assistance; Independent Verification and Validation; Program Management and Support; Information Engineering & Software Development; Database Engineering and Management; Security Engineering; and Communications Engineering.

1985 - Present Special Laboratory Consultant - Toxicological and General Scientific issues.

1980-1985 Senior Toxicologist, Armed Forces Institute of Pathology (AFIP); Washington D.C. This job and that of Chief Toxicologist of the U. S. First Army entailed determining what information needed to be found for each forensic case. Determining a course of action to be followed for each case by designing appropriate test procedures to accomplish the task, and reviewing all test data before writing a decision paper. The work incorporated the use of all the state-of-the-art scientific instrumentation and several different computer systems. Instrumentation used included GC/MS's, Gamma Counters, Atomic Absorption Spectrophotometers, UV & IR Spectrometers, and HPLCs. The work required evaluating existing methodologies to determine if they would resolve a particular analytical problem, determining whether existing methodology could be modified to resolve the problem, or whether new methodologies had to be developed.

1975-1989 General Laboratory Supervisor, University Hospital, Baltimore, Maryland. Supervised the Operations of the Clinical Pathology Laboratories during a tour of duty when the Directors of each Lab were off duty. These Laboratories were: Chemistry, Microbiology, Hematology, and Blood Bank. Responsible for all computer operations of the laboratory's billing; and served as liaison to the Information Resource Management Division.

1976-1980 Chief Chemist, First Army Drug Testing Laboratory, Ft. Meade, Maryland. Designed test procedures and protocols to be used on a regular basis to analyze biological fluids for drugs of abuse. Supervised the performance of standardized tests using RIA and GC/MS techniques for the Department of Defense's Drug Testing Program.

Chief Toxicologist, U. S. First Army, Ft. Meade, Maryland. Developed, modified and/or adapted analytical methods for the detection, identification and assay of chemical drugs and toxic substances in blood, urine, tissue and the environment. Keeping in mind that the objective in this endeavor must be the implementation of procedures that could be performed with the instruments and facilities available in the immediate laboratory. The First Army area embraced 21 states and there were about 100 hospitals served. Toxicological analyses of a complex nature were employed using principles of Physical Chemistry, Organic Chemistry, Biochemistry, Qualitative and Quantitative Analysis, the chemistry of complex poisons and specialized instrumentation techniques for chemical analyses. These analyses are usually performed on body fluids and tissues to establish the cause of death; to determine if alcohol, drugs, or poisons may be a contributing factor in accidental death; to determine illegal use of narcotics and drugs by addicts, suicide attempts, and accidental ingestion; to determine drug levels in patients being treated for diseases; and to determine potency of drugs in cases of suspected adulteration or mislabeling. Studied particular toxicological and environmental health problems that are presented to the laboratory by the Armed Forces in this area. Statistically evaluate the derived data, determine its validity, and where feasible, disseminate technical instructional material to the 100 or more Armed Forces facilities supported by the laboratory. Served as consultant to the other sections and divisions as well as other government agencies that requested laboratory support on toxicological, environmental and special chemistry problems.

Other Duties, Responsibilities and Memberships

University of Maryland, University College; Board of Visitors Howard Community College; Technology Advisory Board Howard County School System Board of Advisors Northern Virginia Technology Council High Technology Council of Maryland Howard County Chamber of Commerce