Speckin Forensics, LLC

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LEONARD A. SPECKIN

MICHAEL J. SINKE LATENT PRINT SPECIALIST CRIME SCENE RECONSTRUCTION FORENSIC DOCUMENT ANALYST

ROBERT D. KULLMAN FORENSIC DOCUMENT ANALYST

LARRY A. DALMAN

DR. GEORGE F. JACKSON Ph.D.

ERICH J. SPECKIN FORENSIC DOCUMENT ANALYST INK DATING SPECIALIST

ROGER J. BOLHOUSE MBA

LABORATORY DIRECTOR

CRIME SCENE RECONSTRUCTION

FORENSIC ANALYST & CONSULTANT

THOMAS K. HUARD Ph.D. DNA ANALYST & CONSULTANT

ROBERT B. CILWA FORENSIC FIREARMS EXAMINER RICHARD L. BRUNELLE RETIRED INK DATING CONSULTANT

DR. LAURENCE R. SIMSON M.D.

DR. JAY A. SIEGEL Ph.D.
ANALYTICAL CHEMIST

COLIN V. SHELLHORN COMPUTER & GRAPHICS SPECIALIST

DR. JULIE HOWENSTINE
SEROLOGIST
DNA ANALYST & CONSULTANT
CRIME SCENE RECONSTRUCTION

Dr. THOMAS K. HUARD, Ph. D.

DNA Analyst & Consultant

EDUCATION

Degree	Year	Major	Institution
Ph.D.	1978	Microbiology and Immunology	University of Illinois Medical Center
M.S.	1976	Microbiology and Immunology	University of Illinois Medical Center
B.S.	1970	Biology	University of Illinois, Chicago
	1965-1969	Biology	DePauw University

CURRENT POSITION

Director of Molecular Diagnostics
 American Medical Laboratories
 14225 Newbrook Drive
 Chantilly, Virginia 20153
 Dates: February 18, 2002-present

CURRENT PROFESSIONAL ACTIVITIES

 \cdot Technical, administrative, and supervisory management of a Clinical Molecular Diagnostics reference laboratory . Responsible for daily operations, technical supervision, quality assurance, new test development, education and training.

CURRENT CONSULTANT POSITION

· DNA Analyst

Speckin Forensic Laboratory

2105 University Park Drive Okemos, MI 48864

Dates: June 1, 1997- present

PREVIOUS RELEVANT POSITIONS

· Technical Director Clinical Laboratory Sparrow Health System* 1215 E. Michigan Avenue Lansing, MI 48912

Dates: 9/93-2/02

*"Ranked in Top 100 Hospitals, 2000"

Technical Director
 Clinical Immunology & Flowcytometry
 Warde Medical Laboratory
 6500 Venture Drive
 Ann Arbor, MI 48103

Dates: 7/89-9/93

ACADEMIC and PROFESSIONAL APPOINTMENTS

Position	Term	Department	Institution
Director	2002-present	Molecular Diagnostics	American Medical Laboratories
Director	1993-2002	Immunology	Sparrow Health System
Director	1993-2002	Flow Cytometry	Sparrow Health System
Director	1993-2002	Paternity Testing	Sparrow Health System
Asst. Adj. Professor	1994-2002	Ped. & Human Development	Michigan State University
DNA Analyst	1997-present	Forensic Identification	Speckin Forensic
Laboratory Director	1993-1998	Histocompatibility	Sparrow Health System
Director	1993-1998	Cytogenetics	Sparrow Health System

Director	1989-93	Immunology	Warde Medical Laboratory
Associate Director	1989-1993	Flow Cytometry	St. Joseph's Mercy Hospital
Clinical Associate	1990-1993	Clinical Lab Science	Eastern Michigan University
Asst. Res. Scientist	1980-1989	Hematology/Oncology	University of Michigan
Associate Member	1980-1989	Dept. Micro/Immunology	University of Michigan
Member	1987-1989	Comprehensive Cancer Center	University of Michigan
Member	1987-1989	Cellular Bioengineering Prog.	University of Michigan
Post-Doctoral Fellow	1978-1980	Hematology/Oncology	University of Michigan
Med Technologist	1972-1978	Dept. Micro/Immunology	Rush- St. Luke's Hosp.,Chicago
Research Assoc.	1970-1974	Dental Research Institute	Amer. Dental Assoc., Chicago
Graduate Student	1972-1978	Dept. Micro/Immunology	Univ. of Illinois Med. Center

CLINICAL TEST RESPONSIBILITIES

· Autoimmune Disease Serology, Protein Chemistry, Infectious Disease Serology, Flow Cytometry, Histocompatability, Prenatal Screening, Paternity Testing, Molecular Diagnostics, Immunohistochemistry, Tissue Immunofluorescence, Cytogenetics

MEMBERSHIPS IN PROFESSIONAL SOCIETIES

- · Association for Molecular Pathology Current
- · American Association of Clinical Chemists Current
- · Diagnostic Immunology Division
- · Molecular Diagnostics Division
- · Clinical Cytometry Society Current

- · American Association of Immunologists
- · Society for Analytical Cytology
- · American Association for Cancer Research
- · American Federation for Clinical Research
- · Sigma XI Research Society of North America
- American Tissue Culture Association
- · Reticuloendothelial Society

COMMITTEE AND ADMINISTRATIVE SERVICES

- · Chairman, American Association of Clinical Chemists, Michigan Section, 2002
- \cdot Legislative Liaison, American Association of Clinical Chemists, Michigan Section, 2000-2001
- Program Chairman, American Association of Clinical Chemists, Michigan Section, 1998-2000
- · Radiation Safety Officer, Sparrow Regional Laboratories 1998-2002
- Member, Bone Marrow Transplant Task Force, Sparrow Hospital, 1993-2002
- · Member, Mid-West Flow Cytometry User's Group, 1987-2002
- · President, Oak Hill Enterprises, Ann Arbor, Michigan, 1987-present
- · Member, Laboratory Project Test Group, Consortium for Lyme Disease, 1989-92
- · Member, Tumor Immunology Program, University of Michigan Cancer Center, 1987-1989
- · Member, Drug Development Program, University of Michigan Cancer Center, 1987-1989
- · Member, Tumor Metastasis Program, University of Michigan Cancer Center, 1987-1989
- · Consultant, Environmental Research Institute of Michigan, Ann Arbor, MI 1987-1989
- · Director, University of Michigan Tissue Culture Club, 1986-1989
- · Consultant, Gelman Sciences, Ann Arbor, MI 1986
- · Judge, State Science Fair Competition, Manchester Community Schools, Manchester, MI, 1985-present.
- · Liaison-to-Private Sector, Council for Midwest Immunology Conference, 1985-1987
- · Symposium Chairman "Macrophage Activation" Mid-West Immunology Conference, Chicago, 1985
- · Scientific Consultant, Chi Systems, Inc., Ann Arbor, MI 1984
- · Council Member, Mid-West Immunology Conference, 1983-1988
- Member, Scientific Advisory Board, Dental Research Institute,
 U of M School of Dentistry, 1983-1987
- · Study Section Member, Experimental Immunology, NIH, 1981
- · Workshop Chairman: "Leukocyte Biochemistry and Function," Internat. Congress of Hematol., Montreal, 1980

TEACHING EXPERIENCE:

- \cdot Lecturer: Obstetrics and Gynecology Residents Conference, Michigan State University
- · Lecturer: Grand Rounds-Pathology Didactic Series, Sparrow Health System
- · Hematology/Coagulation Course: Non-traditional Applications of Flow Cytometry, Michigan State Univ.

- \cdot Medical Technology: Clinical Laboratory Science, College of Health and Human Services, EMU
- \cdot Immunology 624: General Immunology, Department of Microbiology and Immunology, U of M
- · Microbiology/Immunology 705: Advanced Topics in Immunology, Dept. of Micro. and Immuno., U of M
- · Immunobiology 414: Department of Zoology, U of M
- · Hematology; Clinical and Laboratory Review: Anti-Tumor Immunology, Dept. of Internal Medicine, U of M
- \cdot Medical Student Research Program: Research Training in Cancer Immunology, U of M
- · Dental Student Research Program: Research Training in Inflammation and Disease, U of M
- \cdot Cellular Bioengineering: Graduate Student Research and Training in Cell Culture Technology, U of M

HONORS AND AWARDS

- · Young Researchers Award International Association for Dental Research (IADR) 1974
- · Young Investigator Award National Institutes of Health (NIH) 1980

RESEARCH INTERESTS

· Molecular biology of infectious disease; molecular biology of oncology; molecular diagnosis of genetic diseases; cell-mediated immunity and cancer; mechanisms of cell mediated cytotoxicity; monocyte-macrophage immunobiology; immunological effects of biological response modifiers, e.g., interferon, IL-2; adoptive immunotherapy of cancer; biology of the extracellular matrix proteins in relation to cancer and metastasis; large-scale production of monoclonal antibodies; automated cell culture systems; cellular bioengineering and stem cell biology; bone marrow transplantation; latex allergy.

CURRENT RESEARCH PROJECTS

- · Accurate Quantitation of CMV DNA Variants in Transplant Patients by Real-Time PCR. American Medical Laboratories, Molecular Diagnostics Department, Shawn Carver, Gary Milburn, PhD and Thomas K. Huard, PhD.
- · Mechanisms of Metastasis in Prostate Cancer. MSU Department of Zoology, Mukta Webber, Ph.D., Diane Bello de Campo, Ph.D. Bill Chu, MS, Thomas K. Huard, Ph.D.
- · Dendritic Cell Activation by GM-CSF in Metastatic Breast Carcinoma. MSU Dept. Of Internal Medicine. F. Gary Renshaw, D.O., N. Dimitrov, M.D., Thomas K. Huard, Ph.D.
- · Latex Allergy: Epidemiology and Prevalence. Dennis Ownby, M.D., Medical College of Georgia, Andy Saxon, M.D., UCLA Medical School, Thomas K. Huard, Ph.D., Sparrow Health System.
- · Effects of Corticosteroids on the Immunophenotype in Premature Infants. MSU Dept. of Pediatrics and Human Development, Magid Farid, M.D., Julia Frei, M.D., Thomas K. Huard, Ph.D.
- · Development of the T-Cell Immune System and Effect of Cytokines on the Ontogeny of White Blood Cells of Premature Neonates, Said Omar, M.D., Julia Frei, M.D., Thomas K. Huard, Ph.D.
- · Effect of Antenatal Steroids on Bronchoalveolar Inflammatory Response in Premature Infants at Risk of BPD. MSU-Dept. of Pediatrics and Human Development, Padmani Karna, M.D., Magid Farid, M.D., Thomas K. Huard, Ph.D.

PREVIOUS FUNDED RESEARCH PROJECTS

- · Evaluation of an ELISA Methodology for CD4 Counting. Michigan Department of Public Health grant, 1994.
- · The Mechanisms of Interferon Action in Hairy Cell Leukemia, NCI-RO-1grant, 1988-1989.

- · Efficient Monoclonal Antibody Production, NASA grant, 1987-1991
- · Human Bone Marrow: Large-Scale Cultivation, NSF grant, 1988-1989
- · Life Support Systems Via the Use of Cell Culture, NASA/ERIM grant, 1987-1989
- · Use of IL-2 in Growth and Expansion of Tumor Infiltrating Lymphocytes, Hoffman LaRoche contact, 1987-1989
- · UM Tissue Culture Club, NCI Core grant, 1987-1989
- · Immunoregulation in Cutaneous T-Cell Lymphoma, ACS grant, 1989-1991
- · Secondary Metabolite Synthesis Via Plant Cell Culture, NASA grant, 1989-1992
- · Lymphokine Activated Killer Cells and Interleukin-2 in Cancer, El DuPont contract, 1989-1990
- · Leukocyte Interaction with the Extracellular Matrix Protein Laminin in Metastasis, NCI RO-1 grant, 1985-1989.
- · Fc Receptor Function in Immunological Disease, Inflammation and Cancer, NIH Young Inv. Grant, 1981-1985.

MOST RECENT PUBLICATIONS

- · Huard T, Katzman G, and Davis B. Clinically Useful Nontraditional Applications of Flow Cytometry, in "Flow Cytometry and Clinical Diagnosis" 3rd Ed., DF Keren, P. McCoy, and J. Carey, eds., ASCP Press, Chicago, pp. 543-580, 2001.
- · Omar S, Woolevier D, and Huard TK. Alteration of lymphocyte subpopulations in newborn infants with early-onset sepsis. Pediatric Research 49: A1308, 2001.
- · Saxon A, Ownby D, Huard T, Parsad R, and Roth HD. Prevalence of IgE to natural rubber latex in unselected blood donors and performance characteristics of AlaSTAT testing. Ann. of Allergy, Asthma, and Immunol. 84: 199-206, 2000.
- · Webber MM, Trakul N, Thraves PJ, Bello-DeOcampo D, Chu WW, Storto PD, Huard TK, Rhim JS, and Williams DE. A human prostatic stromal cell line WPMY-1: a model for stromal:epithelial interactions in prostatic neoplasia. Carcinogenesis 20:1185-1192, 1999.
- · Huard, T. Clinically Useful Nontraditional Applications of Flow Cytometry, in "Flow Cytometry and Clinical Diagnosis" 2nd Ed., DF Keren, C Hanson, and PE Hurtubise, eds., ASCP Press, Chicago, 1994.

COMPLETE PUBLICATION LIST (available upon request)

- · Completed publications in scientific journals: >15
- · Chapters in books: 8
- · Abstracts presented at national meetings: >50

FORENSIC CASE EXPERIENCE

- · Case Review: >5,000
- · Court Testimony/Deposition: >50
- · Case Mix:
- · Paternity
- · Immigration
- · Forensic Identification
- · Criminal Sexual Assault
- · Homocide
- · Test Experience:
- · DNA Extractions/Hybridization
- PCR Procedures
- · RFLP Procedures
- · AmpFLP
- ·STR
- $\cdot \, \mathsf{HLA}$
- · ABO Blood Groups

- · Semen Analysis
- · Hair Analysis
- $\cdot \ \text{Urine Analysis}$
- · Statistical Analysis