DAVID G. KUHEL, M.S.

University of Cincinnati
Department of Pathology and Laboratory Medicine
david.kuhel@uc.edu
513-484-4896

Molecular Biologist

PROFESSIONAL HIGHLIGHTS

- Fifteen years as a molecular biologist with academic, clinical and pharmaceutical experience
- Dynamic, agile investigator with the ability to refocus and adapt with clarity and efficiency
- Project coordination including study design, team assembly, and data management and presentation
- Primary contact for inter and intra-institutional collaborations
- Vast technical skills with an aptitude for assay design, development and troubleshooting
- Excellent presentation skills as demonstrated at national scientific meetings as a scientist and at product shows as a sales representative
- Taught, trained and assisted numerous students, technicians and post-doctoral researchers
- Writing skills include standard operating procedures, protocols, presentations and primary literature

TECHNICAL SKILLS

Genomics: qPCR - Primer Assay Design (SYBR and Taqman) and Optimization, SNP and CNV Analysis. LAM-PCR. Nucleic Acid Isolation from all Tissues. Subcloning and Library Creation. miRNA Identification in Tissues, Fluids, and Exosomes. RNASeq, miRNASeq, and Array Data Analysis. Genespring and Online Database Mining and Pathway Analysis.

Proteonomics: Protein Isolation and Western Blotting. Column Chromatography (Anion Exchange, Affinity, Size Exclusion, HPLC, FPLC). Protein Expression Tag Purification. Cell fractionation. Immunoprecipitation.

Tissue Culture: Primary Cell Isolation and Culture - Hepatocytes, Aortic Smooth Muscle Cells, Adipocytes, Stromal Vascular Cells, Bone Marrow, Macrophages. Vast Array of Established Cell Line Culture. Liposome and Viral Mediated Transduction.

Flow Cytometry: MACS® and Ficoll Cell Separation/Preparation. MultiFluor Labeling/Gating of Proteins and Lipids. Cell Cycle, Proliferation, and Apoptosis Analysis.

Rodent Skills: Animal Colony Management, Including Breeding Strategies and Genotyping Assay Development. Skills Include Husbandry, Tissue Procurement and Processing, Injections, and Surgical Skills

Additional Skills: ELISA and Plate Assay Design and Development. Adenovirus Creation, Production and Purification. Ultracentrifugation. Lentivirus Applications in Cell Culture and Rodent Models. Surgical Skills in Mouse with *in vivo* and *ex vivo* Proficiencies. Bright Field and Fluorescent Microscopy. Laboratory Equipment Repair.

EDUCATION

Master of Science, Department of Zoology, Miami University, Oxford, Ohio, 1999. Advisor: Dr. Jane Petschek
Thesis: Mutation of 4f-rnp, an RNA-binding protein, through local hop P-element mutagenesis

Bachelor of Science, Department of Zoology, Miami University, Oxford, Ohio, 1993.

PROFESSIONAL EXPERIENCE

University of Cincinnati, Department of Pathology and Laboratory Medicine, Cincinnati, Ohio.

- *Research Associate* (8/07 – present)
  Lab Manager: Manage research projects and present findings to local and national audiences
  Technically concentrated on qPCR, microRNA, genomics, cell culture and flow cytometry
  Biosafety, Radiation Safety and IACUC protocol management and compliance assurance
- *Research Associate* (6/99 – 4/04)
  Acting Lab Manager, including project management as well as budget management
- *Research Assistant II* (1/97 – 10/98)
  Performed day-to-day lab duties

PGC Scientifics, Inc., Cincinnati, Ohio (5/05 – 5/06) – *Sales Representative*

- Sold life science products, consumables and capital equipment to laboratories covering Ohio, Kentucky and Indiana
- Organized and participated in product shows

Cincinnati Children's Hospital Medical Center, Department of Experimental Hematology

- *Sr. Research Assistant II* (5/04 –4/05)
- Worked in CLIA/CAP certified translational clinical science lab as molecular biologist, specializing in qPCR, LAM-PCR and cell culture. Analysis of virally-transduced bone marrow cells by FC and qPCR.
- Develop SOPs, including SLP and QC for clinical assays adhering to regulatory guidelines
- Ensured NIST traceability of equipment and reagents

Molecular Research Laboratories, Highland Heights, Kentucky (7/00 – 1/01) – *Contract Scientist*

- Independently performed APOE isotyping assays

Molecular Diagnostics Laboratories, Cincinnati, Ohio (12/99 – 1/01) – *P/T Contract Scientist*

- Designed and executed clinical genetic assays

Inotek Corp., Cincinnati, Ohio (10/98 – 6/99) – *Research Assistant III*

- Founded core molecular laboratory for biotech startup, specializing in RNase protection assays.

RECENT PUBLICATIONS

Konaniah ES, **DG Kuhel**, JE Basford, NL Weintraub NL, DY Hui. 2017. Deficiency of LRP1 in Mature Adipocytes Promotes Diet-Induced Inflammation and Atherosclerosis-Brief Report. *ATVB*, Jun;37(6):1046-1049

Chatterjee, TK, BJ Aronow, WS Tong, D Manka, Y Tang, VY Boqdanov, D Unruh, AL Blomkalns, MG Jr Piegore, DS Weintraub, SM Rudich, **DG Kuhel**, DY Hui, NL Weintraub. 2013. Human coronary artery perivascular adipocytes overexpress genes responsible for regulating vascular morphology, inflammation, and hemostasis. *Physiological Genomics*, 45(16):697-709.

Kuhel, DG, E Konaniah,J Basford, C McVey, C Goodin, T Chatterjee, N Weintraub, DY Hui. 2012. Apolipoprotein E2 Accentuates Postprandial Inflammation and Diet-induced Obesity to Promote Hyperinsulinemia in Mice. *Diabetes*. Feb;62(2):382-91.

A full list of publications can be found at Research Gate:
https://www.researchgate.net/profile/David_Kuhel