Curriculum Vitae, Sri K. Diah, Ph.D.

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Training

NIEHS (Research Fellow, Office of Clinical Research, 2002–2003, 2006-present)

- Studies on the identification and functional relevance of single nucleotide polymorphisms (SNPs) in genes implicated in neoplasia as well as autoimmune diseases such as rheumatoid arthritis.

CHILDRENS HOSPITAL, HARVARD MEDICAL SCHOOL. (Research Fellow, Dept. of Surgical Research, 2001-2002)

Antizyme-mediated cancer cell growth repression through cell cycle protein degradation

- Designed siRNAs for antizyme protein and developed a procedure for their delivery into cancer cells
- Utilized the above siRNAs and immunoblotting techniques to investigate the effect of downregulating antizyme protein expression on cell cycle progression in cultured tumor cells

BROWN UNIV. SCHOOL OF MED. (Research Associate, Division of Medical Oncology, 1999–2001)

Mechanisms of amino acid-responsive gene regulation during liver tumor progression

- Cloned and characterized the promoter of LAT1 (L-type Amino acid Transporter 1), a recently discovered amino acid transporter implicated in liver cancer, using genome walking/PCR, inverse RACE, primer extension, and promoter-reporter analysis
- Analyzed the newly cloned LAT-1 promoter for potential amino acid response elements, which have been shown for their role in tumor progression

Expression of LAT-1 in liver tissues

- Purified LAT-1 antibody using HPLC (IgG isolation) and affinity chromatography
- Utilized the above antibody and immunohistochemical assays to analyze expression of LAT-1 protein in human liver

Education

1999 Ph.D., Biochemistry, WAKE FOREST UNIV. SCHOOL OF MED.

Thesis : Xenobiotic detoxification and drug resistance in MCF7 breast cancer cells : roles of multidrug resistance proteins and glutathione S-transferases (GSTs)

- Analyzed sensitivities of various cancer cells to cytotoxic drugs using cytotoxicity assays
- Developed HPLC methods to analyze metabolic products (glutathione conjugates) of toxins and cancer drugs in cancer cells
- Synthesized metabolic products (glutathione conjugates) of toxins and cancer drugs by chemical methods and purified them by HPLC

1994 B.S., Biochemistry (honors), Virginia Tech, Blacksburg, VA

Honors and Professional Memberships

2000 – to date	Member, American Association for Cancer Research
1996 – to date	Member, American Association of University Women
1996-1997	Fellowship, American Association of University Women
1992	Luther K. Brice Chemistry Award, Virginia Tech
1991-1994	World Bank Undergraduate Scholarship to Virginia Tech

Publications

1. Padbury JF, Diah SK, McGonnigal B, Miller C, Fugere C, Kuzniar M, and Thompson NL. 2004. Transcriptional regulation of the LAT-1/CD98 light chain. Biochem. Biophys. Res. Commun. 318 : 529-534.

2. Newman RM, Mobascher A, Mangold U, Koike C, Diah S, Schmidt M, Finley D, and Zetter BR. 2004. Antizyme targets cyclin D1 for degradation. J. Biol. Chem. 279 : 41504-41511.

3. Diah SK, Padbury JF, Campbell WA, Britt D, and Thompson NL. 2001. Molecular cloning of the rat TA1/LAT1/CD98 light chain gene promoter. Biochim. Biophys. Acta 1518 : 267-270.

4. Diah SK, Smitherman PK, Aldrich J, Volk EL, Schneider E, Townsend AJ, and Morrow CS. 2001. Resistance to mitoxantrone in multidrug-resistant MCF7 breast cancer cells: evaluation of mitoxantrone transport and the role of multidrug resistance protein family of proteins. Cancer Research 61:5461-7.

5. Diah SK, Smitherman PK, Townsend AJ, and Morrow CS. 1999. Detoxification of 1-chloro-2,4-dinitrobenzene (CDNB) in MCF7 breast cancer cells expressing glutathione *S*-transferase P1-1 (GST P1-1) and/or multidrug resistance protein 1 (MRP1). Toxicol. Appl. Pharmacol. 157 : 85-93.

6. Morrow CS, Diah SK, Smitherman PK, Schneider E, and Townsend AJ. 1998. Multidrug resistance protein and glutathione *S*-transferase P1-1 act in synergy to confer protection from 4-nitroquinoline 1-oxide toxicity. Carcinogenesis 19 : 109-115.

7. Morrow CS, Smitherman PK, Diah SK, Schneider E., and Townsend AJ. 1998. Coordinated action of glutathione S-transferases (GSTs) and multidrug resistance protein 1 (MRP1) in antineoplastic drug detoxification. J. Biol. Chem. 273 : 20114-20120.

8. Wong C, Wu W, Obenshain S, Diah SK, Faiola B, and Kennelly PJ. 1994. High-molecular-weight polypeptide substrate for phospholysine phosphatases. Anal. Biochem. 222 : 14-18.