

**BIOGRAPHICAL SKETCH**

Provide the following information for the key personnel in the order listed for Form Page 2.  
Follow the sample format on for each person. (See attached sample). **DO NOT EXCEED FOUR PAGES.**

NAME		POSITION TITLE	
Gautam Chaudhuri, M.D., Ph.D.		Professor, Departments of Obstetrics and Gynecology and Molecular and Medical Pharmacology	
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Calcutta University	M.B., B.S.	1965	Medicine
All-India Institute of Medical Sciences, New Delhi, India	M.D.	1967	Medicine/Pharmacology
University of London	Ph.D.	1975	Pharmacology

**A. Positions and Honors.****Positions and Employment**

1968 – 1969	Demonstrator in Pharmacology, Maulana Azad College, New Delhi.
1969 – 1969	Senior House Officer, Dept. of Clinical Measurement, Middlesex Hospital, London.
1970 – 1975	Lecturer in Pharmacology, Charing Cross Hospital Medical School, London.
1976 – 1976	Lecturer and Senior Registrar in the Dept. of Pharmacology and Obstetrics and Gynecology, Charing Cross Hospital Medical School, University of London.
1977 – 1977	Senior lecturer and consultant in the Dept. of Pharmacology and Obstetrics and Gynecology, Charing Cross Hospital Medical School, University of London.
1980 – 1986	Assistant Professor, Obstetrics and Gynecology, UCLA School of Medicine, Los Angeles.
1986 – 1988	Associate Professor, Obstetrics and Gynecology, UCLA School of Medicine, Los Angeles.
1988 – 1990	Associate Professor, Obstetrics and Gynecology and Pharmacology.
1990 – Present	Professor, Obstetrics and Gynecology and Pharmacology.

**Other Experience and Professional Memberships**

1983	Diplomate in Obstetrics and Gynecology (American Board of Obstetrics and Gynecology)
1984	Diplomate in Reproductive Endocrinology and Infertility (American Board of Obstetrics and Gynecology) Member, Society for Gynecologic Investigation. British Pharmacological Society.

**B. Selected peer-reviewed publications (in chronological order).**

- Farias-Eisner R, **Chaudhuri G**, Aberhard E, Fukuto JM. The chemistry and tumoricidal activity of nitric oxide-hydrogen peroxide and the implications to cell resistance/susceptibility. *J Biol Chem* 1996;271:6144-6151.
- Cohen GA, Hobbs A, Fitch RM, Zinner MJ, **Chaudhuri G**, Ignarro LJ. Nitric oxide regulates endothelium-dependent vasodilator responses in the rabbit hindquarters vascular bed in vivo. *Am J Physiol* 1996;271:H133-139.
- Thomsen LL, Farias-Eisner R, **Chaudhuri G**. Nitric oxide: Role in cervical cancer. *Biol of nitric oxide* 1996;298(5).
- Brauner R, Laks H, Drinkwater DC Jr, **Chaudhuri G**, Shvarts O, Drake T, Bhuta S, Mishaly D, Fishbein I, Golomb G. Controlled periadventitial administration of verapamil inhibits neointimal smooth muscle cell proliferation and ameliorates vasomotor abnormalities in experimental vein bypass grafts. *J Thoracic Cardiovas Surg* 1997;114:53-63.
- Glasgow RE, Buga GM, Ignarro LJ, **Chaudhuri G**, Heymann MA. Endothelium-derived relaxing factor as a mediator of bradykinin-induced perinatal pulmonary vasodilatation in fetal sheep. *Reprod Fertil Develop* 1997;9:213-216.
- Nathan L, **Chaudhuri G**. Estrogen and atherosclerosis. *Ann Rev Pharmacol* 1997;37:477-515.
- Singh R, Pervin S, Rogers NE, Ignarro LJ, **Chaudhuri G**. Evidence for the presence of an unusual nitric oxide and citrulline producing enzyme in rat kidney. *Biophys Res Comm* 1997;232:672-677.
- Zhang RS, Guth PH, Scremin OU, Singh R, Pervin S, **Chaudhuri G**. Regulation of endometrial blood flow in ovariectomized rats: assessment of the role of nitric oxide. *Am J Physiol* 1997;273:H2009-2017.

9. Pervin S, Singh R, Rosenfeld M, **Chaudhuri G**, Nathan L. Estradiol supplementation to ovariectomized hypercholesterolemic rabbits suppress MCP-1 expression in vivo: Implications for atherosclerosis. *Arteriosclerosis Thrombosis Vasc Biol* 1998;18:1575-1582.
10. Hayashi T, Yamada K, Esaki T, Muto E, **Chaudhuri G**, Iguchi A. Physiological concentrations of 17 $\beta$  estradiol inhibit the synthesis of nitric oxide synthase in macrophages via a receptor mediated system. *J Cardiovasc Pharmacol* 1997;31:292-298.
11. Nathan L, **Chaudhuri G**. Antioxidant and prooxidant actions of estrogens: Potential physiological and clinical implications. *Sem Reprod Endocr* 1998;16:309-314.
12. Grewal M, Cuevas J, **Chaudhuri G**, Nathan L. The effects of calcitonin gene related peptide on vascular resistance in the rat: Role of sex steroids. *Am J Physiol* 1999;276:H2063-2068.
13. Amarnani S, Sangrat B, **Chaudhuri G**. Effects of selected endothelium dependent vasodilators on the fetoplacental vasculature: Physiological implications. *Am J Physiol* 1999;277:H842-847.
14. Nathan L, Pervin P, Singh R, Rosenfeld M, **Chaudhuri G**. Estradiol inhibits leukocyte adhesion and transendothelial migration in rabbits in vivo: Possible mechanisms for gender differences in atherosclerosis. *Circ Res* 1999;85:377-385.
15. Hyun J, **Chaudhuri G**, Fukuto JM. The reductive metabolism of nitric oxide in hepatocytes. *Drug Metab Dispos* 1999;27:1005-1009.
16. Honold J, Pusser NL, Nathan L, **Chaudhuri G**, Ignarro LJ, Sherman MP. Production and excretion of nitrate by human newborn infants: Neonates are little adults. *Nitric Oxide* 2000;4:35-46.
17. Singh R, Pervin S, Shryne J, Gorski R, **Chaudhuri G**. Castration increases and androgens decrease nitric oxide synthase activity in brain: Physiologic implications. *Proc Natl Acad Sci USA* 2000;97:3672-7.
18. Singh R, Pervin S, Karimi A, Cederbaum S, **Chaudhuri G**. Arginase activity in human breast cancer cell lines: N<sup>o</sup>-hydroxy-L-arginine selectively inhibits cell proliferation and induces apoptosis in MDA-MB-468 cells. *Cancer Res* 2000;60:3305-3312.
19. Shah S, Hobbs A, Singh R, Cuevas J, Ignarro LJ, **Chaudhuri G**. Gastrointestinal motility during pregnancy: Role of nitrenergic component of NANC nerves. *Am J Physiol Regul Integr Comp Physiol* 2000;279:R1478-R1485.
20. Pervin S, Singh R, Moncada S, **Chaudhuri G**. Nitric Oxide induced cytostasis and cell cycle arrest of a human breast cancer cell line (MDA-MB-231): Potential role of Cyclin D1. *Proc Natl Acad Sci USA* 2001;98:3583-3588.
21. Nathan L, Shi W, Dinh H, Mukherjee TK, Lusic TJ, **Chaudhuri G**. Testosterone inhibits atherogenesis by conversion to estradiol: critical role of aromatase. *Proc Natl Acad Sci USA* 2001;98:3589-3593.
22. Shah S, Nathan L, Singh R, Fu YS, **Chaudhuri G**. Estradiol and not progesterone increases nitric oxide release from non-adrenergic, non-cholinergic nerves of the gastrointestinal tract: Implications in Pregnancy. *Am J Physiol* 2001;280:R1546-R1554.
23. Pervin S, Singh R, Gau CL, Edamatsu H, Tamanoi F, **Chaudhuri G**. Potentiation of nitric oxide induced apoptosis of MDA-MB-468 cells by farnesyltransferase inhibitor: implications in breast cancer. *Cancer Res* 2001;61:4701-4706.
24. Singh R, Pervin S, Wu G, **Chaudhuri G**. Activation of caspase-3 activity and apoptosis in MDA-MB-468 cells by N<sup>o</sup>-hydroxy-L-arginine, an inhibitor of arginase, is not solely dependent on reduction in intracellular polyamines. *Carcinogenesis* 2001;22:1863-1869.
25. Campisi R, Nathan L, Pampaloni MH, Schoder H, Sayre JW, **Chaudhuri G**, Schelbert HR. Noninvasive assessment of coronary microcirculatory function in postmenopausal women and effects of acute and chronic estrogen administration. *Circulation* 2002;105:425-430.
26. Mukherjee T, Dinh H, **Chaudhuri G**, Nathan L. Testosterone attenuates expression of Vascular Cell Adhesion Molecule-1 by conversion to Estradiol by Aromatase in Endothelial cells: Implications in Atherosclerosis. *Proc Natl Acad Sci USA* 2002;99:4055-4060.
27. Singh R, Pervin S, **Chaudhuri G**. Caspase -8 mediated BID cleavage and release of mitochondrial cytochrome c during N<sup>o</sup>-hydroxy L-arginine induced apoptosis in MDA-MB-468 cells: antagonistic effects of L-ornithine. *J Biol Chem* 2002;277:37630-37636.
28. Mukherjee TK, Nathan L, Dinh H, Reddy ST, **Chaudhuri G**. 17-Epiestriol, an estrogen metabolite, is more potent than Estradiol in inhibiting VCAM-1 mRNA expression. *J Biol Chem* 2003;278:11746-11752.
29. Singh R, Pervin S, **Chaudhuri G**. Nitric oxide induced Bax integration into the mitochondrial membrane commits MDA-MB-468 cells to apoptosis: Essential role of Akt. *Cancer Res* 2003. (In Press)

## C. Research Support

### Ongoing Research Support

5 RO1 HD35991 Chaudhuri (PI)

2/1/1999 – 1/31/2004

NIH/NICHD

Pregnancy and GI Motility: Role of Nitric Oxide

The goal of this project is to examine the mechanism by which gastrointestinal motility is modulated during pregnancy.

Role: PI

5 K12 HD01281 Chaudhuri (PI)

9/30/1998 – 11/30/2003

NIH/NICHD

UCLA Women's Reproductive Health Research Center

The overall theme of the WRHR Center will be to emphasize a fundamental approach to the diseases of women that include the disciplines of developmental biology, molecular genetics and cell biology, behavioral science as well as translational and clinical investigative research.

Role: PI

5 K12 HD01400 Chaudhuri (PI)

8/30/2000 – 7/31/2005

NIH/NICHD

Building Interdisciplinary Research Careers in Women's Health (BIRCWH) Center

The goal of the BIRCWH Center is to train researchers, especially physicians/scientists to be independent investigators in research related to Women's Health.

Role: PI

5 RO1 CA78357 Chaudhuri (PI)

7/1/2000 – 6/30/2005

NIH/NCI

Estradiol, Nitric Oxide and Cyclin D<sub>1</sub> in Breast Cancer

This project is directed towards studying the interrelationship between estradiol, NO and cyclin D<sub>1</sub> and the effects of NO on the growth of human breast cancer cell lines and the cellular and molecular mechanism involved.

Role: PI

RO1 AG115857 Chaudhuri (PI)

9/30/2000 – 8/31/2005

NIH/NIA

Role of NO and Estradiol in Aging and Atherogenesis

The overall hypothesis to be tested is that "the mere withdrawal of E2 or T leads to a decrease in NO synthesis, and thereby, to a pro-inflammatory response of the vascular wall leading to changes seen early in atherogenesis. A corollary would be that the atherogenic process on the extreme might increase the production of OONO and under such conditions NO inhibition might actually be beneficial."

Role: PI

### Completed Research Support

N/A