Gail C. Fraizer , Ph.D.

Curriculum Vitae Education:

Ph.D. and M.P.H., Microbiology University of California-Berkeley,
B.Sc. (Honors), Microbiology, University of Washington, Seattle, WA

Academic Experience:

Assistant Professor, 7/01-present, Department of Biological Sciences, Kent State University, Kent, OH
Instructor, 10/97-7/01, Department of Urology, U.T. M.D. Anderson Cancer Ctr, TX
Research Associate, 8/89-9/97, Department of Biochemistry and Molecular Biology, U.T. M.D. Anderson Cancer Center, Houston

Teaching at Kent State University
Courses: Essentials of Genetics (BSCI 30156), since 2001
Writing Intensive (BSCI 40600), since 2001
Biological Foundations (BSCI 10120). Spring 2002 & 2004

Selected Honors

National Academy of Sciences Education Fellow (life Sciences), 2004
Professional Women of Kent State University distinguished service award, 2004
Mortar Board Faculty recognition award, 2003
International Bladder Society First Prize Basic Science Presentation, 1999
Texas Genetics Society First Prize Postdoctoral Presentation, 1993 & 1994

Recent and pending grant support:

P.I. Fraizer, NCI, CA113360-01, Regulation of VEGF by WT1 , (Pending review)

P.I. E. Mintz, NSF 01-171- Major Research Instrumentation, NSF , Acquisition of Equipment for a microgenomics facility , G. Fraizer: Co-PI, 2003

P.I. G. Fraizer, Research Challenge Grant, Ohio Board of Regents, Diagnostic and therapeutic advances require isolation and quantitative analysis of rare cell populations 2003

P.I. G. Fraizer, Dept. of Defense. Prostate Cancer Research Program Grant, Repression of the androgen receptor by WT1, a tumor suppressor gene . 9-98 to 9-01,

P.I. G. Fraizer, PRS Executive Council Award, U.T. M.D.Anderson Cancer Center, Does BTAK Overexpression in Bladder Cancer Cells lead to Aneuploidy? , awarded 10-15-99 to 10-15-2000,

Representative Publications:

1. Kylie Graham, Wen-Liang Li, Bryan Williams and Gail Fraizer, Vascular Endothelial Growth Factor (VEGF) is differentially expressed in WT1- and DDS-LNCaP cells. Intl J Cancer (submitted)

2. Fraizer G., Zhou, H., Diaz M., I-L Lee, Liebert M., Grossman, H., Sen, S., STK15/BTAK/aurora2 enhances chromosomal instability in bladder cancer cells. Intl. J Oncol 25 (6): 1631-1640 (2004).

3. Gail C Fraizer, R Leahy, S. Priyadarshini, K Graham, M. Diaz, J. Delacerda, Prostate tumor suppression mediated by WT1, a tumor suppressor gene Intl. J Oncol 24:461-471(2004).

4. Zaia, A., Fraizer, G.C., Piantanelli, L., Saunders, G., Wilms Tumor Suppressor Gene WT1 Regulates Androgen-signaling Pathway by Repressing Androgen Receptor Gene Transcription: Role in Prostate Cancer? AntiCancer Research 21:1-10 (2001).

5. Tanaka, M., Fraizer G., DeLaCerda, J., Cristiano, R., Liebert, M., Grossman, B., 2000, Connexin 26 enhances the bystander effect in HSVtk/GCV gene therapy for human bladder cancer by adenovirus/PPL/DNA gene delivery . Gene Therapy 8:139-148 (2001).

6. Patmasiriwat, P., Fraizer, G.C., Kantarjian, H., Saunders, G.F. WT1 and GATA-1 Expression and Abnormal Chromosomes in Myelodysplastic Syndrome and Acute Leukemia Leukemia13:891-900(1999).

7. Fraizer, G.C., Shimamura, R., Zhang, X., and Saunders, G.F. PAX 8 Regulates Human WT1 Transcription Through a Novel DNA Binding Site, J Biol. Chem. 272:30678-30683 (1997).

8. Shimamura, R., Fraizer, G.C., Trapman, J., Lau, Y.F.C., and Saunders, G.F. The Wilms Tumor Gene WT1 can Regulate Genes Involved in Sex Determination and Differentiation: SRY, Mullerian Inhibiting Substance, and Androgen Receptor, Clinical Cancer Research 3: 2571-2580 (1997).

Theses Advised:

Masters Thesis: Kylie Graham, " Identification of Vascular Endothelial growth factor (VEF) as a differentially expressed gene in wild-type and mutant Wilms tumor (WT1) transfected LNCaP clones , submitted 4/2004

Honors Undergraduate Thesis: Rachel Leahy, Wilms Tumor Suppressor Gene (WT1) induces apoptosis in prostate cancer , submitted 5/2003

Recent Published Abstracts with undergraduate authors

G. Fraizer, R Leahy, K Graham, A. Korchnak, N.Bertolone, S. Priyadarshini, The Wilms tumor suppressor gene, WT1, enhances apoptosis and suppresses prostate tumor cell growth in vivo. American Association for Cancer Research, Orlando, FL, 3-04

Gail C Fraizer, R Leahy, M Martin, S. Priyadarshini, K Graham, M. Diaz, J. Delacerda, WT1 mediated Prostate tumor suppression , American Association for Cancer Research , Toronto, Ontario, CANADA, 4-03

Gail C Fraizer, R Leahy, S. Priyadarshini, K Muncy, M Martin, M. Diaz, J. Delacerda, Prostate tumor suppression mediated by WT1, a tumor suppressor gene , Second International Conference on Prostate Cancer Research, Iowa City, IA, 10-02

Invited Seminars

1. Lerner Research Institute, Cleveland Clinic Foundation, Suppression of Prostate Cancer growth and VEGF expression by by WT1 the Wilms tumor suppressor gene, 9-7-04

2. McArdle Research Cancer Research Center, Univ. of Wisconsin-Madison, Suppression of Prostate Cancer growth by WT1 the Wilms tumor suppressor gene , Aug 16, 2004

3. Biochemistry and Molecular Pathology series, Northeast Ohio University College of Medicine, The Wilms tumor suppressor gene, WT1, enhances apoptosis and suppresses prostate tumor cell growth in vivo 1/7/04

4. Department of Biological Sciences, Kent State University, Kent, OH, The Wilms tumor suppressor gene, WT1, enhances apoptosis and suppresses prostate tumor cell growth in vivo , 11/13/03

5. Biochemistry series, Department of Chemistry, Kent State University The Wilms tumor suppressor gene, WT1, enhances apoptosis and suppresses prostate tumor cell growth in vivo 10/28/03

6. Department of Biological Sciences, Wright State University, Dayton, OH, 2-12-01, STK15/BTAK/Aurora2 enhances chromosomal instability in bladder cancer cells

7. American Association for Cancer Research Annual Meeting, New Orleans, 3-24-01, STK15/BTAK,enhances chromosomal instability in bladder cancer cells .

8. Southwest Meeting of the Society for Developmental Biology, Houston, 3-12-00 Overexpression of mitotic kinase, STK15/BTAK, in bladder cancer cells .

9. Department of Urology Research Seminar, U.T. M.D.Anderson Cancer Ctr., TX, 7-7-99; Role of WT1 in prostate cancer progression

10. Division of Biomedical Sciences, Meharry Medical College, Nashville, TN, 5/29/96 Regulation and expression of a developmentally important tumor suppressor, WT1

Service

Dept of Defense, Prostate Cancer Research Program, Panel Member of Study Section CBY#3 for Cell Biology, grant reviewer, 2002-04
President Northeast Ohio Chapter Association for Women in Science, 2003
NAS Summer Institute on Undergraduate Education in Biology participant 2004
Founder Biotechnology Journal Club
Graduate Advisor BMS and BSCI
Advising Honors Thesis Research
ILS-Medical Student admissions committee member
Biology Majors Advisor for B.S. degree