

FRANCESMARY MODUGNO, Ph.D., M.P.H.

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EDUCATION AND TRAINING

Post-Graduate

1998-2000	University of Pittsburgh/ National Cancer Institute	Fellowship	Molecular Epidemiology and Cancer Prevention
1997-1998	University of Pittsburgh	Fellowship	Molecular Toxicology

Graduate

1997-1998	University of Pittsburgh	M.P.H 1998	Epidemiology
Thesis: <u>A Role for the Estrogen-Metabolizing Cytochrome P450 Enzymes in Breast Carcinogenesis.</u> Delta Omega Best Master's Thesis Award			

1987-1995	Carnegie Mellon University	M.S. 1989 Ph.D. 1995	Computer Science Computer Science
Dissertation: <u>Extending End-User Programming in a Visual Shell with Programming by Demonstration and Graphical Language Techniques.</u> ACM Distinguished Dissertation Award Nominee			

Undergraduate

1983-1987	Cornell University	A.B. 1987	Mathematics and Computer Science (Magna Cum Laud)
Senior Thesis: <u>Function Finder -- An Application of Computer Science in Math Education.</u>			

ACADEMIC AND PROFESSIONAL HONORS

1999, 2000	American Association For Cancer Research (AACR) Young Investigator Award		
1991	Sigma Xi Research Honor Society		
1987	Phi Beta Kappa		
1987	Presidential Scholar, Cornell University		
1986	AT&T Bell Laboratory - Women's Achievement Award		

APPOINTMENTS AND POSITIONS

Academic

- 2000-2006 Assistant Professor, Epidemiology
University of Pittsburgh
- obtained over 35 peer-reviewed grants totaling \$9+ million from Federal, State and private agencies in the areas of women's health and cancer
 - authored over 45 peer-reviewed journal articles and 60 other publications
 - nominated for Provost's Award for Excellence in Mentoring
 - developed 3 courses focused on cultivating clinical research skills through hands-on approaches (one course is now a department requirement)
 - advised 6 Ph.D., 8 M.P.H. and 8 field placement students
- 2000-2006 Co-Director, Cancer Epidemiology and Prevention Training Program
University of Pittsburgh Cancer Institute
- created a PhD program and obtained \$1.8 million in support from the National Cancer Institute
 - increased enrollment from 2 to 9 in 5 years
- 1995-1996 Research Associate, Computer Science and Engineering
University of Washington, Seattle Washington
- 1989 Instructor, Computer Science
Johns Hopkins University Center for the Advancement of Academically Talented Youth

Non-Academic

- 1989 Digital Equipment Corporation Systems Research Center, Intern
- 1987-88 AT&T Bell Laboratories, Technical Associate
- 1986 Bell Communications Research, Staff Technologist

PROFESSIONAL ACTIVITIES

1. Teaching

Courses Taught ***denotes courses that I designed and implemented*

Year(s)	Title
2004-2006	**Advanced Topics in Cancer Epidemiology I and II <ul style="list-style-type: none">provided hands-on experience with IRB procedures, grant writing, study sections (peer reviews), and clinical, laboratory and statistical techniques employed in population-based and clinical research studies
2003-2006	**Reading, Analyzing and Interpreting the Public Health and Medical Literature <ul style="list-style-type: none">reviewed research methodology for population-based and clinical research studies, and provided hands-on experience with library searches, comprehensive literature reviews, and critiquing research studies
2000-2004	Cancer Epidemiology Journal Club (Faculty Facilitator)
1995-1996	Software Safety and the Human Computer Interface
1995-1996	**Model Checking (Co-Leader)
1996	Software Engineering (Project Supervisor and Lecturer)
1989	Algorithms and Computability

2. Service

a. Department and School Service (last 5 years only)

Years	Committee
2003-2006	Curriculum Review Committee Department of Epidemiology, University of Pittsburgh <ul style="list-style-type: none">revised curriculum and requirements for all graduate degree and certification programsensured compliance with department, school, university and accreditation requirements
2003-2006	Educational Policy and Curriculum Committee Graduate School of Public Health, University of Pittsburgh <ul style="list-style-type: none">maintained, updated and approved all policy and procedures regarding education and curriculum within the schoolensured all courses and educational programs adhered to accreditation requirements and prepared school for re-accreditation
2003	Admissions Revision Committee, Department of Epidemiology, University of Pittsburgh <ul style="list-style-type: none">revised admission policies and procedures, including recruitment methods

b. Study Section, Review Panel, and Advisory Board Service (last 5 years only)

Years	Committee
2003, 2006	Research Grants Council of Hong Kong
2005-2006	Study of Osteoporotic Fractures (SOF) Publications and Proposal Committee
2003-2006	Cancer Prevention Research Base in the Community Clinical Oncology Program (CCOP) - Epidemiology Research/Outcomes Research Modality Committee
2003-2005	ZCA1 SRRB-Q (01) National Cancer Institute, Prevention Research and Epidemiology Study Section
2004	Women's Health Initiative Design and Analysis Committee
2004	Cluster Review Panel NCI-E GRB-F P01 Projects in Breast and Gynecologic Cancers Population-Based Prevention Studies Study Section
2004	Department of Defense Ovarian Cancer Research Program OC-2 Panel
2003	Research into Aging Foundation, United Kingdom
2002	PA Department of Health Ovarian Cancer Research Award Initiative

c. Service to Professional Organizations

Years	Committee
1987-2007	Various Academic and Scientific Periodicals, Reviewer
2002, 2005	International Ovarian Cancer Symposia, Chair
1995-1997	International Conference on Human Factors in Computing Systems Basic Research Symposium, Program Committee Member '95, Chair '96-97
1996	User Interface Software Technology (UIST'96), Demonstrations Chair
1992	Expanding Your Horizons Workshop Leader

d. Community Service (last 5 years only)

Years	Organization
2007-	St. Elizabeth Ann Seton Parish Nurse Program, Board Member
2007-	Carlynton Swim Club, Board Member
2001-2006	National Ovarian Cancer Coalition (NOCC), Pittsburgh Division Advisor
2002-2003	Pennsylvania Breast Cancer Coalition, Speaker
2002-2003	Hadassah – Healthy Women, Healthy Lives, Sponsor

3. Selected Grants (from over 35)

	Years	Grant and Title	Source	Direct Costs
1	2007-2009	NHLBI-WHI-06-09 Hormone Therapy, Estrogen Metabolism and Risk of Breast Cancer or Hip Fracture in the WHI Hormone Study	National Heart, Lung, and Blood Institute	560,000
2	2006-2009	BC050518 Inflammatory Markers and Breast Cancer Risk	Department of Defense	300,000
3	2005-2007	R03 CA115214 Radiation Exposure, BRCA1/2 Mutations and Risk of Breast Cancer in Belarus	National Cancer Institute	100,000
4	2004-2008	DAMD17-02-1-0669 Population Development, Data and Specimen Collection and Biostatistical Core Facility	Department of Defense	720,000
5	2004-2008	DAMD17-02-1-0669 Genetic and Lifestyle Determinants of Hormonal Risk Factors Associated with Ovarian Cancer: an International Comparison	Department of Defense	180,000
6	2002-2004	R21-CA95113 Evaluation of Serum Biomarkers of Breast/Ovarian Cancer Risk	National Cancer Institute	250,000
7	2001-2003	BCTR0100640 Estrogen Metabolism, BMI, HRT and Postmenopausal Breast Cancer Risk	Susan G. Komen Foundation	86,000
8	1995-1997	CISE Research Associate Award in Experimental Computer Science	National Science Foundation	80,000
9	1993-1994	Graduate Fellowship	American Association of University Women	15,000
10	1988-1993	Graduate Fellowship	Fannie and John Hertz Foundation	100,000

4. Selected Publications (from over 100)

- 1 **Modugno**, Kip, Cochrane, et al. Obesity, Hormone Therapy, Estrogen Metabolism and Risk of Postmenopausal Breast Cancer. *International Journal of Cancer* 118(5):1292-301, 2006.
- 2 **Modugno**, Ness, Chen, Weiss. Inflammation and Endometrial Cancer: A Hypothesis. *Cancer Epidemiology, Biomarkers and Prevention* 14: 2840-2847, 2005
- 3 **Modugno**, Zmuda, Potter, et al. Estrogen Metabolizing Polymorphisms and Breast Cancer Risk among Older White Women. *Breast Cancer Research and Treatment* 93(3):261-70, 2005.
- 4 **Modugno**, Ngo, Allen, et al. Breast Cancer Risk Factors and Mammographic Breast Density In Women Over Age 70. *Breast Cancer Research and Treatment* 93(3):261-70, 2005
- 5 **Modugno**, Zmuda, Potter, et al. The Association of Estrogen Receptor α Polymorphisms with Breast Cancer Risk in Older White Women. *International Journal of Cancer*. 116(6):984-91, 2005.
- 6 **Modugno**. Ovarian Cancer and Polymorphisms in the Androgen and Progesterone Receptors. *American Journal of Epidemiology* 159(4):319-335, 2004.
- 7 **Modugno**, Knoll, Kanbour-Shakir, Romkes. A Role for the Estrogen-Metabolizing Cytochrome P450 Enzymes in Breast Carcinogenesis. *Breast Cancer Research and Treatment* 82(3):191-197, 2003.
- 8 **Modugno**. Ovarian Cancer and High-Risk Women: Implications of Screening, Prevention and Early Detection. *Gynecologic Oncology* 91:15-31, 2003.
- 9 **Modugno**, Moslehi, Ness, et al. Reproductive Factors and Ovarian Cancer Risk in Jewish BRCA1 and BRCA2 Mutation Carriers. *Cancer Causes and Control* 14(5):439-446, 2003.
- 10 **Modugno**, Weissfeld, Trump, et al. Allelic Variants of Aromatase and the Androgen and Estrogen Receptors: Towards a Multigenic Model of Prostate Cancer Risk. *Clinical Cancer Research* 7:3092-3096, 2001.
- 11 **Modugno**, Weissfeld, Hill. Reproducibility in the Assessment of Postmenopausal Ovaries with Transvaginal Ultrasound. *Gynecologic Oncology* 77:289-292, 2000.
- 12 **Modugno**, Corbett, Myers. Visual Programming in a Visual Shell -- A Unified Approach. *Journal of Visual Languages and Computing* 8(5-6):491-522, 1997.
- 13 **Modugno**, Leveson, Reese, Partridge and Sandys. Integrated Safety Analysis of Requirements Specifications. *Journal of Requirements Engineering* 2:65-78, 1997.
- 14 **Modugno** and Myers. Visual Programming in a Visual Shell -- An Empirical Evaluation. *ACM Transactions on Computer-Human Interaction* 4(3):276-308, 1997.

5. Recent Academic Presentations

Year	Title of Presentation	Venue
2006	Breast Cancer and Aging	Aging and Cancer Program, University of Pittsburgh Cancer Institute
2005	Ovarian Cancer Risk Factors: Putting the Pieces Together	Senior Vice Chancellor Research Seminar, University of Pittsburgh
2004	Epithelial Ovarian Cancer and Endometriosis	American Society of Preventive Oncology Annual Meeting
2003	Current Heavy Ethanol Consumption is a Risk Factor for Mucinous Epithelial Ovarian Cancer	Society for Epidemiologic Research Annual Meeting
2003	Exploring the Roles of Hormones and Inflammation in Ovarian Cancer Epidemiology	Women's Cancer Research Seminar Series. Ovarian Cancer Center of Excellence, Magee-Womens Hospital
2003	Ovarian Cancer Epidemiology: Recent Results and New Initiatives	Magee-Womens Research Institute
2002	From Computer Science to Epidemiology	Carnegie Mellon University
2002	Genetic Polymorphisms and Cancer Risk	National Society of Genetic Counselors Annual Meeting
2002	Hormones and Prostate Cancer Risk	Urology Grand Rounds, University of Maryland
2001	Cigarette Smoking is a Risk Factor for Mucinous but not for Non-Mucinous Epithelial Ovarian Tumors	Congress of Epidemiology
2000	A Multigenic Model of Prostate Cancer Risk	American Association For Cancer Research Annual Meeting
2000	Ovarian Cancer and High-Risk Women	Roswell Park Cancer Center
2000	Ovarian Cancer Risk and Survival in High-Risk Women	American Society of Preventive Oncology New Investigator's Workshop

6. Membership in Professional and Scientific Societies

1998-present	American Association for Cancer Research (AACR) <ul style="list-style-type: none">• Minorities in Cancer Research• Women in Cancer Research• Molecular Epidemiology Working Group
2002-2006	American College of Epidemiology (ACE)
2001-2006	Society for Epidemiology Research (SER)
1999-2006	Association of Preventive Oncology (ASPO)
1992-2006	American Association of University Women (AAUW)
1992-2006	Association of Women in Science (AWIS)
1990-1997	Association for Computing Machinery (ACM) <ul style="list-style-type: none">• Special Interest Group – Computer-Human Interaction (SIGCHI)
1992-1997	Institute of Electrical and Electronic Engineers (IEEE)