

Curriculum Vitae

**BENITA S. KATZENELLENBOGEN**

**Mailing Address:**

Department of Molecular and Integrative Physiology  
University of Illinois and College of Medicine  
524 Burrill Hall                      phone: (217) 333-9769  
407 S. Goodwin Avenue  
Urbana, IL 61801-3704              e-mail: katzenel@illinois.edu

**Biographical Background:**

Born: New York, New York  
Citizenship: U.S.A.

**Educational Background:**

B.A. summa cum laude, City University of New York, New York, Biology major, June 1965  
M.A. in Biology, Harvard University, Cambridge, Massachusetts, June 1966  
Ph.D. in Biology, Harvard University, Cambridge, Massachusetts, March 1970  
Research Advisor: Professor Fotis C. Kafatos  
Postdoctoral (NIH), University of Illinois, Urbana, Department of Physiology and Biophysics.  
Sponsor: Professor Jack Gorski, April 1970-September 1971

**Professional Employment:**

Assistant Professor of Physiology, University of Illinois, College of Medicine at Urbana, and  
Department of Physiology and Biophysics, University of Illinois, Urbana, September  
1971 - August 1976  
Associate Professor of Physiology, August 1976 - August 1982  
Visiting Professor (sabbatical), University of California at San Francisco, September 1977 - June  
1978, with Prof. Keith Yamamoto, Dept. of Biochemistry and Biophysics  
Professor of Physiology, August 1982 - present, and Professor of Cell and Developmental  
Biology, January 1989 - present

**Honors, Awards and Fellowships:**

N.I.H. Predoctoral Fellowship - Developmental Biology, 1965 - 1969  
N.I.H. Postdoctoral Fellowship - Endocrinology, 1970 - 1971  
National Young Scholar Recognition Award, Amer. Assoc. of University Women, 1981  
Ernst Oppenheimer Award, The Endocrine Society, for meritorious research, 1984  
Medallion of Honor Award, University of Illinois Mothers Association, for important  
contributions to the University, 1987  
Thomas A. Murphy University Scholar, for distinction as a member of the faculty of the  
University of Illinois, 1987 - 1990  
Beckman Associate, Center for Advanced Study, University of Illinois, 1988  
Susan G. Komen Foundation Award for breast cancer research, 1988, 1993  
MERIT Award from the National Cancer Institute, NIH, 1991 – 1999  
Plenary Lecture, Endocrine Society 74th Annual Meeting, 1992  
Fellow, American Academy of Arts and Sciences, elected 1993  
Faculty Member of the Year Award, University of Illinois College of Medicine, 1994  
Scientific Distinction Award, Susan G. Komen Breast Cancer Foundation, 1996

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William L. McGuire Memorial Lectureship, University of Texas and Glaxo Wellcome Oncology, 1996  
Plenary Lecture, 10th International Congress of Endocrinology, 1996  
Thomas Muldoon Memorial Lectureship, Medical College of Georgia, 1998  
Jill Rose Award for Breast Cancer Research, The Breast Cancer Research Foundation, 1998  
The Ray A. and Robert L. Kroc Lectureship, University of Texas-Houston Health Science Center and M. D. Anderson Cancer Center, 1998  
Olof Pearson Lectureship, Case Western Reserve University Cancer Center, 1999  
NIEHS Distinguished Lectureship, NIEHS/NIH, 2000, 2005, 2012  
Swanlund Professorship, University of Illinois, 2000–present  
Professor in the Center for Advanced Studies, University of Illinois, 2000–present  
City University of New York Distinguished Alumni Award, 2002  
Roy O. Greep Lecture Award, The Endocrine Society, 2006  
Laurea ad Honorem (Honorary Degree) from University of Milan, Italy, 2007  
Nobel Conference on Estrogen Signaling: From Molecular Insights to Clinical Understanding, Keynote Address, Stockholm, 2008  
Susan G. Komen for the Cure Brinker Award for Scientific Distinction, 2009  
Mentor Award, Women in Endocrinology, 2011  
Plenary Lecturer, The Endocrine Society of Australia, Melbourne, August 2014  
Fred Conrad Koch Lifetime Achievement Award, The Endocrine Society, 2016

## Professional Activities:

Endocrinology Study Section, NIH, 1979–1983  
Biochemical Endocrinology Study Section, NIH, 1995–1999  
National Institute of Diabetes, and Digestive and Kidney Diseases (NIH) Board of Scientific Counselors, 1985–1989; Chairman, 1988–1989  
Advisory Committee on Biochemistry and Endocrinology, American Cancer Society, 1989–1993; Vice-Chairman, 1992–1993  
Grants Review Panel, Susan G. Komen Breast Cancer Foundation, 1994  
Grants Review Panel, Endocrine Society Student Fellowship Awards, 1994  
President-Elect, The Endocrine Society, 1999–2000  
President, The Endocrine Society, 2000–2001  
Past-President, The Endocrine Society, 2001–2002  
Publications Committee, The Endocrine Society, 1981–1983  
Program Committee, The Endocrine Society, 1983–1987  
Council, The Endocrine Society, 1989–1992  
Nominating Committee, The Endocrine Society, 1994–1997, 2002–2004 and 2016-2019  
Awards Committee, The Endocrine Society, 2009–2013  
Editorial Board, Endocrinology, 1979–1982 and 1999–2002  
Editorial Board, Amer. Journal of Physiology: Cell Physiology, 1981–1988  
Editorial Board, Journal of Steroid Biochemistry and Molecular Biology, 1981–2004  
Editorial Board, Receptor, 1992–1997  
Editorial Board, Endocrine Reviews, 1983–1988  
Editorial Board, Molecular Endocrinology, 1994–1997  
Scientific Organizing Committee, Meadowbrook-Serono Conference on Steroid Receptors in Health and Disease, 1987, 1992  
International Organizing Committee, Intl Congress on Hormones and Cancer, 1987–1999  
American Association for Cancer Research, Task Force on Endocrinology, 1987–1989  
Chairman, Gordon Research Conference on Hormone Action, August 1988  
Central Committee, International Society of Endocrinology, 1988–2000

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National Science Foundation, Alan T. Waterman Award Committee, 1989–1991  
Scientific Advisory Board, Don Shula Foundation, 1991–1994  
Program Committee, Recent Progress in Hormone Research Conference, 1993–1996  
Co-Chair, Keystone Symposium on The Nuclear Receptor Superfamily, 2002  
NIH Nuclear Receptor Signaling Atlas (NURSA), External Advisory Board, 2002–2012  
External Advisory Committee to Breast Cancer SPORE programs – Northwestern Medical, 2002-2006, and Georgetown Medical Center, 1995-2006; DOD Breast Cancer Center of Excellence, Fox Chase Cancer Center, 2006 – 2012  
Department of Defense Breast Cancer Review Panel, 2012; DOD Innovator Award Review Panel, 2018; and NIH Predoctoral and Postdoctoral Review Panel, 2010 and 2011; NIH NCCAM Grants Review Panel, 2013  
Editorial Board, Nuclear Receptor Signaling 2013-2016; and Journal of the Endocrine Society 2016-2018  
Associate Editor, NPJ (Nature Partner Journal) Breast Cancer, 2015-Present

### Memberships:

Phi Beta Kappa, The Endocrine Society, American Association for Cancer Research, American Physiological Society, Society for the Study of Reproduction, Society of Toxicology

### Areas of Research Experience:

Cancer biology, endocrinology, and women's health. Regulation of gene expression, signal transduction, cell proliferation and other phenotypic properties by hormones and growth factors; mechanisms of hormone and antihormone (SERM) action in normal and cancer cells; functional analyses of nuclear hormone receptors. Basic and translational studies directed at understanding genomic, including global gene expression, regulation by estrogens and genome-wide interactions of estrogen receptors, coregulators, and protein kinases in steroid signaling in reproductive tissues in health and disease, and approaches for preventing or reversing therapy resistance in breast cancer (Present).

Estrogen effects on specific RNA and protein synthesis in the uterus, with particular emphasis on *in vitro* hormone-induced syntheses (Postdoctoral).

Developmental biology: Hormones and enzymes involved in the moulting process in insects (Doctoral).

### Current Teaching and Research Activities:

Teaching endocrinology, physiology and molecular and cellular biology and cancer biology to medical students and undergraduate and graduate students. Supervise graduate seminars in Endocrinology, Cancer Biology, Reproductive Biology and Cell Biology. Direct students in research and training in reproductive endocrinology, hormones and cancer, cell biology, cancer biology.

Research students in my laboratory:

Ph.D. 1 current, 37 conferred  
M.A. 12 conferred  
B.S. 2 current, 25 conferred

Post-doctoral/Visiting Scientists:

2 current, 37 former

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**Research Support:**

- (1) NIH USPHS Grant HD 06726 "Effects of Estrogen on Human Uterine Tissue *in Vitro*"  
May 1, 1972 - April 30, 1975  
June 15, 1975 - May 30, 1978  
June 1, 1978 - May 30, 1981  
June 1, 1981 - May 30, 1984
- (2) NIH USPHS Grant CA 18119 "Antiestrogens: Mechanism of Antagonist Action"  
December 1, 1975 - November 30, 1978  
December 1, 1978 - November 30, 1981  
December 1, 1982 - November 30, 1985  
December 1, 1985 - November 30, 1990  
December 1, 1990 - November 30, 1998 (MERIT Award)  
April 1, 1999 – March 31, 2004  
May 1, 2004 – April 30, 2010
- (3) NIH USPHS Grant CA 31870 "Cytotoxic Estrogens: Selective Agents for Breast Cancer" February 1, 1983 - January 31, 1986
- (4) NIH USPHS Grant HD 21524/CA 51482 "Progesterone Receptor Regulation"  
April 1, 1986 - November 30, 1989  
December 1, 1989-November 30, 1994
- (5) American Cancer Society Grant PDT-370 "Progesterone Receptor Regulation in Breast Cancer" July 1, 1989 - June 30, 1992
- (6) NIH USPHS Grant CA60514 "Dominant Negative Estrogen Receptors and Breast Cancer"  
July 1, 1993 - June 30, 1998  
July 1, 1998 - April 30, 2004
- (7) U.S. Army Breast Cancer Program Grant DAMD17-94-J-4205  
"Cyclic AMP Modulation of Estrogen-Induced Effects: A Novel Mechanism for Hormonal Resistance in Breast Cancer" October 1, 1994 - September 30, 1998
- (8) The Breast Cancer Research Foundation  
"Genomic Profiling of the Estrogen Hormonal Pathway for Breast Cancer Prevention and Treatment" October 1, 1998 - September 30, 2019 (renewed yearly)
- (9) NIH/NIA P01 AG024387-01 to 05 (William Helferich, Director; B. S. Katzenellenbogen, Co-PI on Project 4 and Core C Director)  
NIH "Phytoestrogens and Aging: Dose, Timing & Target Tissue"  
September 1, 2004 – August 31, 2010
- (10) Participant in NIH Training Grants in Reproductive Biology (to University of Illinois, Dr. A. Nardulli, Director); Cell and Molecular Biology (to University of Illinois, Dr. J. Morrisey, Director); Radiation Oncology (to University of Illinois – Dr. W. D. O'Brien, Jr., Director); and Environmental Toxicology (to University of Illinois, Dr. S. Schantz, Director)

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- (11) NIH NICHD U54 Center Program in Reproduction and Infertility Research  
“Hormone-Regulated Pathways Controlling Implantation and Fertility”  
M. Bagchi, Director; Benita S. Katzenellenbogen, Project 2, P.I.  
“Nuclear Receptor Coregulators in Implantation and Uterine Function”  
April 1, 2008 – March 30, 2014
- (12) NIH, ODS/NCCAM/NCI 1P50 AT006268, Botanical Research Center  
“Botanical Estrogens: Mechanisms, Dose, and Target Tissues”  
W. Helferich, Director; Benita S. Katzenellenbogen, Project 1, P.I.  
“Molecular Mechanisms and Cellular Pathways of Botanical Estrogen Activity”  
August 1, 2010 – July 30, 2017
- (13) Beckman Institute, UIUC, Seed Grant Initiative  
“Genomic Imaging of Breast Cancer”  
Stephen Boppart, PI; Benita S. Katzenellenbogen, Co-Investigator with four other faculty  
May 15, 2010 – May 14, 2012
- (14) The Breast Cancer Research Foundation  
“Development of Novel Antagonist Ligands for Metastatic Breast Cancers Driven by  
Estrogen Receptors (ERs) with Activating Mutations”  
John A. Katzenellenbogen, PI; Benita S. Katzenellenbogen, Co-Investigator  
July 1, 2016 – June 30, 2019
- (15) 1 R01 CA220284-01A1 PHS NIH  
“Chemical, structural and molecular rules for fully antagonizing the estrogen receptor”  
K. Nettles, PI; Benita S. Katzenellenbogen, Consortium Co-PI  
July 1, 2018 – June 30, 2023

### Facilities Development:

NIH Instrumentation Grant IS10 RR02277 for a Fluorescence Activated Cell Sorter System  
(\$236,276), December 1984, B. S. Katzenellenbogen, P.I.

### Administrative Activities:

- (1) University of Illinois College of Medicine. College Committee on Student Appraisal and on Freshman Subcommittee thereof, September 1971 - June 1976.
- (2) School of Basic Medical Sciences "Medical Manpower Committee." Three-person committee to interview and assess all candidates for academic appointments in the School of Basic Medical Sciences, September 1971 - July 1974.
- (3) College of Medicine at Urbana Executive Committee, October 1976 - July 1980; January 1981 - August 1983; August 1990 - August 1994.
- (4) College of Medicine at Urbana Committee on Committees, October 1976 - July 1980; January 1981 - August 1983; August 1988 - August 1992.
- (5) School of Basic Medical Sciences "Peer Evaluation Committee." Five-person committee to develop guidelines for faculty promotion and tenure, January 1974 - September 1974.

- (6) Physiology Department Graduate Admissions Committee. Five person committee to decide on admissions policies and graduate students admitted to Physiology graduate program, February 1974 - June 1975, July 1976 - August 1982, and July 1985 - present. Chairman of Admissions Committee, Fall 1979 - August 1982.
- (7) Department of Physiology and Biophysics Bylaws Committee. Four person committee to develop departmental bylaws and structure, Spring 1974.
- (8) Member of Search Committee for two endocrinologists. One in the School of Basic Medical Sciences and one in the Department of Physiology and Biophysics, Fall 1972 - Fall 1973.
- (9) Physiology Department Courses and Curriculum Committee, August 1975 - August 1977 and August 1983 - August 1986 and 1999 - 2000.
- (10) Alternate Member, University of Illinois Institutional Review Board. To review research proposals involving human subjects, July 1973-June 1979.
- (11) Search Committee for Executive Dean, College of Medicine, 1979.
- (12) Salary Equity Committee, School of Life Sciences, 1977.
- (13) Appointments, Reappointments and Promotions Committee, College of Medicine at Urbana, July 1978 - present.
- (14) Graduate Qualifying Committee. To admit graduate students to Ph.D. program, August 1978 - June 1979.
- (15) Undergraduate Physiology student advising, 2-3 students per semester.
- (16) Planning Committee, University-wide interdisciplinary faculty symposium on Population, October 1978 - May 1979.
- (17) Research Planning Committee of the School of Basic Medical Sciences, 1981 - 1986.
- (18) School of Life Sciences Policy Forum Committee. To shape directions for the School of Life Sciences, Fall 1982 - 1986.
- (19) Physiology and Biophysics Department Advisory Committee. Advisory committee to the department head, August 1981 - August 1984, August 1992 - August 1994.
- (20) Search Committee for new Head of the Department of Physiology and Biophysics, Fall 1983 and Fall 1987.
- (21) Chairman, Faculty Committee for the University-wide Cell Science Center, Spring 1985 - Fall 1987.

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- (22) Steering Committee, University of Illinois Biotechnology Center, Spring 1985-1988.
- (23) Executive Committee, University of Illinois, Cell and Molecular Biology Program, 1987-1991 and 1995 - present.
- (24) Search Committee for new faculty members, Department of Cell and Structural Biology, Fall 1988 - 1991.
- (25) Seminar Committee, Department of Cell and Structural Biology, Fall 1990 - 1992, 1995 - 1996, and 1998 - 2000.
- (26) Appointments and Promotions Committee, Department of Cell and Structural Biology, 1990 - 1994.
- (27) Beckman Institute, Program Advisory Committee, Fall 1990 - Fall 1991.
- (28) Graduate Committee, Department of Cell and Structural Biology, Fall 1992 - 1995.
- (29) A. V. Nalbandov Lectureship Committee Chairperson, 1992, 1994, 1997.
- (30) Research Policy Committee, University of Illinois, 1993 - 1995.
- (31) School of Life Sciences Review Committee, 1994 - 1995.
- (32) University Committee on Endowed Appointments, 1995 - 1996 and 2000 – 2003; Chair, 2001 - 2003.
- (33) University Scholar Awards Committee, 1998.
- (34) Graduate Program Committee, Molecular and Cellular Biology School, Fall 1998.
- (35) Search Committee, Vice Chancellor for Research, University of Illinois, Fall 1999 - Spring 2000
- (36) Search Committee, Functional Analysis of Macromolecular Assemblies Faculty Search, School of Molecular and Cellular Biology, Fall 2001 – Spring 2002
- (37) Graduate Program Committee, Molecular and Cellular Biology School, 2002 - 2004.
- (38) Director of the Mills Breast Cancer Institute (Carle, UIUC), Search Committee, 2006.
- (39) UIUC Campus-wide Translational Research Initiatives Strategic Planning Committee, 2006 – 2007.

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- (40) Search Committee for Head of Department of Molecular and Integrative Physiology, Fall 2007; Search Committee for New Faculty in Molecular and Cellular Biology, 2009-2010.
- (41) MIP Department Qualifying Exam Committee, 2008-2010.
- (42) CAS (Center for Advanced Studies) Associates and Fellows Selection Committee, 2000-present.
- (43) Faculty Mentoring Committee, Department of Molecular and Integrative Physiology and Department of Cell and Developmental Biology, and Promotions Committee for several faculty members, 2007-present
- (44) UIUC Campus-wide Cancer Community at Illinois Steering Committee, 2011-2017.



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**Seminars and Invited Addresses:**

Harvard University - Developmental Biology, March 1972

Harvard Medical School - Laboratory for Human Reproduction and Reproductive Biology,  
March 1973

Eli Lilly Company, June 1973

Wabash College - Biology Department, November 1973

SUNY at Stony Brook - Health Sciences, May 1974

University of Wisconsin at Madison - Biochemistry Department, May 1974

University of Illinois - Biochemistry Department, November 1974

Brown University - Health Sciences, December 1974

NIH - Reproduction Research Branch, December 1974

University of Michigan Medical School - Department of Pathology (Reproductive Biology),  
January 1975

Southern Illinois University Medical School - Department of Physiology, March 1975

University of Paris South, Lab Hormones, Bicetre, France, February 1976

University of Illinois College of Medicine - Physiology Department, Medical Center Chicago,  
March 1976

University of Illinois - Dairy Science Department, Urbana, November 1976

IMC Chemical Corporation, Indiana, January 1977

University of California Medical Center at San Francisco - Department of Obstetrics and  
Gynecology, Reproductive Biology, January 1977

University of California, Berkeley - Symposium on Contraceptive Hormones and Human  
Welfare, April 1977

NIH-sponsored symposium on "Ontogeny of receptors and molecular mechanisms of  
reproductive hormone action", Austin, Texas, August 1977

University of California at San Francisco - Reproductive Biology, September 1977

University of California at San Francisco - Hormone Research Lab, January 1978

Conference on the Estriol Ratio and Breast Cancer, Sponsored by the Guttman Institute and the  
N.Y. Division of the American Cancer Society, N.Y. City, January 1978

University of California, Riverside - Biochemistry Department, February 1978

U.S.-Japanese Conference on Hormones and Receptors in Breast Cancer, sponsored by the  
National Cancer Institute and the Japanese Government, Hawaii, March 1978

University of California, Los Angeles - Biology Department and Molecular Biology Institute,  
April 1978

Laurentian Hormone Conference, sponsored by the Endocrine Society, Mont Tremblant, Canada,  
August 1978

National Center for Toxicological Research and University of Arkansas, Little Rock, September  
1978

Worcester Foundation Symposium on Steroid Hormone Receptor Systems, Worcester  
Foundation for Experimental Biology, Shrewsbury, Mass., October 1978

Indiana University Medical School, Departments of Physiology and Biochemistry, November  
1978

University of Wisconsin, Madison, Endocrinology Program, October 1978

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University of Pittsburgh Medical School, Department of Physiology, December 1978

University of Iowa, Departments of Physiology and Biophysics and Zoology, February 1979

International Symposium on Steroid Induced Uterine Proteins, Marburg, Germany, September  
1979

First International Congress on Hormones and Cancer, Rome, Italy, October 1979

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- Eighth Brook Lodge Conference on Problems in Reproductive Physiology, Kalamazoo, Michigan, October 1979
- Medical College of Ohio, Toledo, Interdepartmental seminar, September 1980
- Hershey Medical Center, Pennsylvania. Reproductive Biology, October 1980
- University of Wisconsin, Parkside, Life Sciences, October 1980
- McGill University, Montreal, February 1981
- Michigan Cancer Foundation, Topics in Cancer Research Seminar Series, April 1981
- Iowa State University, Zoology and Cell Biology, May 1981
- Fifth International Conference of the Journal of Steroid Biochemistry, Puerto Vallarta, Mexico, July 1981
- University of Maryland Medical School, Department of Physiology, Baltimore, Maryland, October 1981
- National Institute for Environmental and Health Sciences, Raleigh, North Carolina, November 1981
- UCLA-ICN Meeting on Evolution of Hormone Receptor Systems, Squaw Valley, Calif., March 1982
- University of Illinois College of Medicine, Department of Pharmacology, Chicago, April, 1982
- University of Kentucky, Lexington Hormone Research Conference, April, 1982
- Gordon Research Conference, The Mammalian Reproductive Tract, July 1982
- Sixth International Congress on Hormonal Steroids, Jerusalem, Israel, September 1982
- NIH, Reproduction Research and Pregnancy Branch, NICHD, February 1983
- FDA/NIH/WHO Workshop, Animal Testing Guidelines for New Generation Contraceptive Agents, NIH, Bethesda, April 1983
- International Round Table on Recent Advances in Estriol Research, Madeira, Portugal, May 1983
- INSERM, Molecular Endocrinology Unit, Montpellier, France, June 1983
- Gordon Research Conference on Hormone Action, Session Chairman, August, 1984
- University of Chicago, Ben May Laboratory for Cancer Research, Chicago, Illinois, November 1983
- Michigan Cancer Foundation and Comprehensive Cancer Center of Detroit, Symposium on Antiestrogens and Breast Cancer, March 1984
- American Association for Cancer Research, 75th Annual Meeting, Chairman and Speaker, Minisymposium on Receptors and Breast Cancer, Toronto, Canada, May 1984
- International Conference on Estrogens and Antiestrogens, Madison, Wisconsin, June 1984
- Seventh International Congress of Endocrinology, Symposium speaker, Quebec, Canada, July 1984
- University of Rochester Medical Center, Cancer Center and Pharmacology, November 1984
- Seventh Annual San Antonio Breast Cancer Conference, Plenary lecture, December 1984
- Johns Hopkins University Medical School, Population Biology, March, 1985
- International Minerals and Chemical Corporation, Indiana, April 1985
- Gordon Research Conference, Hormone Action, August 1985
- Sixth European Congress on Clinical Chemistry, Jerusalem, Israel, September 1985

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Weizmann Institute of Science, Department of Hormone Research, Rehovot, Israel, September 1985

University of Illinois, Department of Physiology and Biophysics, October 1985

University of Illinois Know Your University Series Speaker, "Cancer Research at the University of Illinois", November 1985

West Virginia University Medical Center, Morgantown, Endocrinology Program and Department of Physiology, November 1985

University of Texas Southwestern Medical School at Dallas, Reproductive Sciences, February 1986

Marquette University Symposium on Receptors as Physiologic Regulators, Plenary lecture, March 1986

FASEB Symposium lecture on Hormone Receptors, Pharmacology Society, St. Louis, April 1986

First International Congress on Cancer and Hormones, Symposium lecture, Rome, Italy, April 1986

University of Pennsylvania Medical School, Department of Obstetrics and Gynecology and Reproductive Sciences, May 1986

Biotechnology Center Symposium on Monoclonal Antibodies, University of Illinois, May 1986

Northwestern University, Program for Reproductive Research and Departments of Physiology and Neurobiology, October 1986

Texas Tech University, Departments of Biochemistry and Reproductive Sciences, March 1987

Rutgers University, Departments of Physiology and Biochemistry, April 1987

Yale University Medical School, Departments of Biochemistry and Obstetrics and Gynecology, April 1987

Harvard Medical School, Laboratory of Human Reproduction and Reproductive Biology, April 1987

University of Wisconsin--Madison, Department of Physiology, April 1987

Eighth International Symposium of the Journal of Steroid Biochemistry, Paris, France, May 1987

Meadowbrook Symposium on Steroid Receptors in Health and Disease, Oakland, Michigan, September 1987

Medical College of Virginia and Fairfax Hospital, Symposium on Advances in Reproductive Medicine, October 1987

AAAS Symposium, Frontiers in Reproductive Biology, Boston, February 1988

University of Chicago, Ben May Laboratory for Cancer Research, March 1988

Eighth International Congress of Endocrinology, Kyoto, Japan, July 1988

International Symposium on Sex Steroid-Dependent Tumors, Tokyo, Japan, July 1988

Fourth International Symposium on Cellular Endocrinology, Lake Placid, NY, August 1988

University of Missouri, Reproductive Sciences, Veterinary and Biomedical Sciences, Columbia, November 1988

Baylor College of Medicine, Cell Biology, March 1989

University of Illinois College of Medicine, Ob/Gyn and Medical Sciences, Chicago, March 1989

Case Western Reserve University, Physiology and Biophysics, April 1989

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American Association for Cancer Research, Symposium talk, San Francisco, May 1989  
Gordon Research Conference on Hormonal Carcinogenesis, July 1989  
University of Illinois, Department of Veterinary Pathobiology, October 1990  
Boston University, Department of Biology, January 1990  
American Association for Cancer Research Special Conference on Steroid Receptors,  
Transcription Factors and Gene Expression, San Diego, February 1990  
Tufts University Medical School, Department of Cell Biology and Anatomy, May 1990  
Gordon Research Conference on Hormone Action, August 1990  
National Cancer Institute-(NIH)-Sponsored Conference on Current Approaches in Breast Cancer  
research and Therapies, St. Michaels, Maryland, September 1990  
University of Indiana Medical School and Eli Lilly Company, Indianapolis, October 1990  
Breast Cancer Think Tank Meeting, Copper Mountain, Colorado, January 1991  
University of Texas Medical Center, Houston, Department of Obstetrics/Gynecology and  
Reproductive Sciences, February 1991  
University of Illinois College of Medicine at Chicago, Department of Obstetrics and  
Gynecology, March 1991  
University of Rochester Medical Center, Department of Biochemistry, May 1991  
University of Pennsylvania Medical School, Pharmacological Sciences and Biochemistry, July  
1991  
Cell and Molecular Biology/Molecular Biophysics Training Grant Symposium Keynote Address,  
University of Illinois, September 1991  
Institute for Hormone and Fertility Research, University of Hamburg, Hamburg, Germany,  
September 1991  
Mayo Clinic, Department of Biochemistry and Molecular Biology, October 1991  
Breast Cancer Think Tank Meeting, Bonaire, January 1992  
Keystone Symposium on the Steroid/Thyroid Receptor Gene Super Family, Tamarron, Colorado,  
February 1992  
Keystone Symposium on Breast and Prostate Cancer, Lake Tahoe, California, March 1992  
Marion Merrell Dow Inc., Cincinnati, Ohio, March 1992  
National Cancer Institute Breast Cancer Research Discussion Panel, NIH, April 1992  
Beckman Institute, University of Illinois, Conference on Receptor Proteins: Structure, Function  
and Modeling, May 1992  
Endocrine Society 74th Annual Meeting, Plenary Lecture, San Antonio, Texas, June 1992  
Eli Lilly Co., Indianapolis, Indiana, July 1992  
Satellite Symposium Ninth International Congress of Endocrinology, "Breast Cancer: Molecular  
Biology to the Clinic", Nice, France, August 1992  
Ninth International Congress of Endocrinology, Symposium Lecture, Nice, France, August 1992  
Meadowbrook Conference on Steroid Receptors in Health and Disease, Rochester, Michigan,  
October 1992  
Saint Louis University Medical Center, Department of Pharmacological and Physiological  
Sciences, November 1992  
President's Special Commission on Breast Cancer, Bethesda, Maryland, November 1992

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William L. McGuire Memorial Symposium, University of Texas Health Sciences Center, San Antonio, January 1993

Breast Cancer Think Tank Meeting, Turks and Caicos Island, January 1993

Rockefeller University-Cornell Medical School-Sloan Kettering-Population Council Inter-Institutional Endocrine Research Seminar, April 1993

Wayne State University Medical School, Departments of Physiology and Biochemistry, April 1993

Eleventh International Symposium of the Journal of Steroid Biochemistry and Molecular Biology, Seefeld, Austria, May 1993

Gordon Research Conference on Hormone Action, August 1993

NIEHS - Research Triangle Reproductive Biology symposium, Plenary Speaker, January 1994

Breast Cancer Think Tank Meeting, Cancun, Mexico, January 1994

Keystone Symposium on Steroid/Thyroid/Retinoic Acid Super Gene Family, Taos, New Mexico, February 1994

University of Illinois College of Medicine, Ob/Gyn Seminar Program, Urbana, March 1994

Komen Breast Cancer Foundation Educational Forum, Keynote Speaker (2 lectures), March 1994, Peoria, Illinois

FASEB Annual Meeting, Special Symposium on Steroid/Thyroid Hormone Signaling Pathways, Anaheim, California, April 1994

First International Symposium on Steroids and Bone, Plenary Speaker, Florence, Italy, May 1994

Ninth Vitamin D Workshop, Plenary Speaker, Orlando, Florida, May 1994

Symposium on Endocrine Resistance in Breast Cancer, Cambridge, England, September 1994

Ninth International Congress on Hormonal Steroids, Dallas, Texas, September 1994

University of Wisconsin, Madison, Reproductive Biology Program, November 1994

Michigan State University, Cancer Center, December 1994

American Association for Cancer Research Symposium on the Nuclear Receptor Superfamily of transcription Factors, Whistler, British Columbia, January 1995

Breast Cancer Think Tank Meeting, January 1995

University of Virginia, Charlottesville, Reproductive Biology Program, April 1995

Southwestern Medical School at Dallas, Physiology, Biochemistry and Reproductive Sciences, April 1995

Schering Workshop on Gene Regulation by Hormones, Berlin, Germany, May 1995

Society for the Study of Reproduction, 28th Annual Meeting, Plenary State-of-the-Art lecture, Davis, California, July 1995

Gordon Research Conference on Hormonal Carcinogenesis, August 1995

Fourth International Bone Forum, Yokohama, Japan, November 1995

Breast Cancer Think Tank Meeting, January 1996

Vanderbilt University Medical School, Reproductive Biology Program, February 1996

Oregon Health Sciences University and Oregon Regional Primate Center, Portland, March 1996

Keystone Symposium on Steroid/Thyroid/Retinoic Acid Gene Family, Lake Tahoe, California, March 1996

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American Association for Cancer Research, Annual Meeting Symposium Lecture, Washington DC, April 1996

Tenth International Congress of Endocrinology, Plenary Speaker, San Francisco, June 1996

21st Meeting of the International Association for Breast Cancer Research, Paris, France, July 1996

University of Colorado Health Sciences Center, Denver, Cell and Molecular Biology Program, September 1996

University of Wisconsin, Madison, Steroid Receptor Superfamily Symposium, September 1996

University of Texas Southwestern Medical Center, Dallas, Reeves Symposium on Breast Cancer Research, October 1996

Komen Foundation Breast Cancer Symposium, Dallas, October 1996

19th Annual San Antonio Breast Cancer Symposium, Plenary Speaker, December 1996

7th Annual Breast Cancer Think Tank Meeting, Georgetown University Medical Center, January 1997

University of Michigan, Ann Arbor, Cell and Molecular Biology Program, February 1997

American Physiological Society, In Focus Experimental Biology 1997, Washington DC, Symposium Organizer and Speaker, April 1997

EMBO Workshop on Nuclear Receptors, Sicily, May 1997

Frontiers in Estrogen Action, Key West, Florida, May 1997

International Union Against Cancer (UICC) Meeting on Cancer Research, Woods Hole, MA, June 1997

Gordon Research Conference on Hormone Action, New Hampshire, August 1997

NCI, NIH, Breast Cancer Program Review Workshop, September 1997

American Cancer Society Schilling Symposium, Santa Cruz, CA, September 1997

Estrogen Action Workshop, Newark, New Jersey, October 1997

Department of Defense, Army Breast Cancer “Era of Hope” Program, Washington, DC, November 1997

Signal Pharmaceutical Co., San Diego, CA, November 1997

8th Annual Breast Cancer Think Tank Meeting, Georgetown University Medical Center, January 1998

Keystone Symposium, Nuclear Receptor Gene Family, Lake Tahoe, CA, March 1998

9th Thomas Muldoon Memorial Lecture, Medical College of Georgia, Augusta, May 1998

University of Illinois Functional Foods for Health Symposium, Allerton, IL, May 1998

Frontiers in Estrogen Action, San Juan, Puerto Rico, May 1998

Endocrine Society, Symposium on Receptor Pharmacology, New Orleans, June 1998

Karolinska Institute and Karo Bio, Stockholm, Sweden, June 1998

Merck Pharmaceutical Company, Rahway, New Jersey, September 1998

University of Illinois, Conference on Estrogens and Human Health, Urbana, IL, October 1998

Breast Cancer Research Foundation, Forum on Hormones and Breast Cancer, New York City, NY, October 1998

The Ray A. and Robert L. Kroc Lectureship, University of Texas-Houston Health Science Center and M. D. Anderson Cancer Center, 1998

Dana Farber Cancer Institute, Harvard Medical School, Boston, MA, December 1998

## Curriculum Vitae

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### Page 16 – Seminars

9<sup>th</sup> Annual Breast Cancer Think Tank Meeting, Georgetown University Medical Center  
Washington, DC, January 1999

Society for Gynecologic Investigation, Symposium Lecture, Atlanta, GA, March 1999

Keystone Symposium, Molecular Pathogenesis of Bone Diseases, Lake Tahoe, CA, March 1999

Frontiers in Estrogen Action, Los Angeles, CA, April 1999

American Association for Cancer Research, Symposium Lecture, Philadelphia, PA, April 1999

Cancer Biology Seminar Series, University of Chicago, May 1999

Nobel Symposium on Estrogens and Women's Health – Benefit or Threat?, Karlskoga, Sweden,  
July 1999

Recent Progress in Hormone Research Conference, Stevenson, WA, August 1999

Progestins and Antiprogestins at the Millennium, International Hormones and Cancer Satellite  
Meeting, Jerusalem, Israel, August 1999

International Hormones and Cancer Congress, Jerusalem, Israel, September 1999

Women's Health Institute, Wyeth-Ayerst, Philadelphia, PA, September 1999

Champaign-Urbana Cancer Conference, Keynote Speaker, Champaign, IL, September 1999

Radiation Oncology Training Program, University of Illinois, September 1999

Symposium on SERMs: Implication for Prevention and Treatment of Cancer, Fox Chase Cancer  
Center, Philadelphia, PA, November 1999

Olof Pearson Lectureship, Case Western Reserve University Cancer Center, Cleveland, OH,  
November 1999

NIEHS Distinguished Lecture Series, Research Triangle Park, NC, February 2000

University of Utah and Society for Gynecological Investigation, Reproductive Sciences 2000:  
Technology in the Service of Biology, Salt Lake City, UT

Legacy Symposia of the Immokalee Foundation and American Cancer Society, Frontiers in  
Cancer Research, Tampa, FL, March 2000

Keystone Symposium, Nuclear Receptors 2000, Steamboat Springs, CO, March 2000

Frontiers in Estrogen Action, Palm Beach, FL, April 2000

NIH Workshop on the Selective Estrogen/Androgen Receptor Modulators (SERMs & SARMs),  
Bethesda, MD, April 2000

11<sup>th</sup> International Congress of Endocrinology, Symposium Lecture, Sydney, Australia,  
November 2000

International Conference on Hormones and Cancer, Port Douglas, Australia, November 2000

Distinguished Guest Lectureship, Baylor College of Medicine, Houston, TX, December 2000

Frontiers in Estrogen Action, Shannon, Ireland, April 2001

Nuclear Receptors Meeting, Oslo, Norway, August 2001

Center for Advanced Study, Eleventh Annual Lecture, University of Illinois at Urbana-  
Champaign, September 2001

Pharmaceutical Society of Korea International Conference, Plenary Lecture, Seoul, October  
2001

Department of Physiology Seminar Series, Southern Illinois University, Carbondale, IL,  
November 2001

University of Maryland–Johns Hopkins University Lectureship in Reproductive Biology,  
Baltimore, MD, November 2001



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### Page 17 – Seminars

- 12<sup>th</sup> Annual Breast Cancer Think Tank Meeting, St. Maarten, Netherlands Antilles, January 2002  
Signal Transduction Colloquium, Duke University Medical Center, Durham, NC, February 2002  
Seminars in Molecular Medicine, Northwestern University Medical School, Evanston, IL,  
March 2002  
Frontiers in Estrogen Action, Amelia Island, FL, April 2002  
Keystone Symposium, Nuclear Receptor Superfamily 2002, Snowbird, UT, April 2002  
ENDO 2002 – 84<sup>th</sup> Annual Endocrine Society Meeting, Symposium Lecture, San Francisco,  
June 2002  
Breast Cancer Targeted Therapies, Maui, HI, July 2002  
Indiana University, Department of Biology, Bloomington, IN, October 2002  
Greater New Orleans Foundation (GNOF) Distinguished Lecture on Women's Health and the  
Environment at e.hormone 2002, New Orleans, LA, October 2002  
National Institutes of Health Conference on The Women's Health Initiative and Menopausal  
Hormone Therapy, Bethesda, MD, October 2002  
Anita Payne Lecture, University of Michigan Reproductive Sciences Program and Annual Poster  
Day, Ann Arbor, MI, November 2002  
13<sup>th</sup> Annual Breast Cancer Think Tank Meeting, Aruba, Dutch Caribbean, January 2003  
Illinois State University, Seminar, Department of Biochemistry and Molecular Biology,  
Bloomington, IL, March 2003  
Frontiers in Estrogen Action, The Homestead, Hot Springs, VA, April 2003  
EMBO Workshop, Biology of Nuclear Receptors, Villeneuve-sur-Mer, France, June 2003  
Breast Cancer Targeted Therapies, Kona, HI, July 2003  
Society of the Study of Reproduction, Plenary State-of-the-Art Lecture, A 2003 Perspective of  
Estrogen Receptor Mechanisms and Cellular Regulation, Cincinnati, OH, July 2003  
American Association for Cancer Research, Advances in Breast Cancer Research: Genetics,  
Biology, and Clinical Implications, Huntington Beach, CA, October, 2003  
Massachusetts General Hospital, Endocrine Grand Rounds, Harvard Medical School, Boston,  
MA, November 2003  
Nuclear Receptors and Endocrine Disorders, Jensen Symposium on Nuclear Receptors and  
Endocrine Diseases, Cincinnati, OH, December 2003  
14<sup>th</sup> Annual Breast Cancer Think Tank Meeting, St. Kitts, West Indies, January 2004  
Keystone Symposium, Nuclear Receptors, Keystone, CO, February 2004  
American Association for Cancer Research 95<sup>th</sup> Annual Meeting, Nuclear Receptors and Cancer  
Prevention, Chairperson and Symposium lecture, Orlando, FL, March 2004  
Midwest Breast Institute and University of Illinois College of Medicine, Targeting Breast  
Cancer: Genomic Approaches toward Advances in Prevention and Treatment, Urbana,  
IL, April 2004  
National Institute on Aging, Workshop on Biology of the Perimenopause: Impact on Health and  
Aging, Bethesda, MD, May 2004  
FASEB Summer Research Conference, Steroid Hormone Receptors: Integration of Plasma-  
Membrane and Nuclear-Initiated Signaling in Hormone Action, Tucson, AZ, July 2004

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### Page 18 – Seminars

- 12<sup>th</sup> International Congress of Endocrinology, Symposium Lecture, Lisbon, Portugal, August 2004
- 2<sup>nd</sup> Symposium on Estrogens and Human Health, University of Illinois, October 2004
- Breast Cancer Research Foundation, Symposium on The Biology of Breast Cancer, New York, NY, October 2004
- American Association for Cancer Research, Advances in Cancer Prevention, Seattle, WA, October 2004
- 15<sup>th</sup> Annual Breast Cancer Think Tank Meeting, Grand Cayman, January 2005
- Keystone Symposium, Hormonal Regulation of Tumorigenesis, Keystone, CO, February 2005
- MD Anderson Cancer Center, Houston, TX, Distinguished Lectureship in Oncology, February 2005
- NIEHS/NIH Distinguished Scientist Lecture, Research Triangle Park, NC, March 2005
- University of Illinois at Chicago Cancer Center Grand Rounds Seminar, Chicago, IL, March 2005
- University of Texas Southwestern Medical Center at Dallas, Department of Biochemistry and Molecular Biology, April 2005
- 8<sup>th</sup> Frontiers in Nuclear Receptor Action, Phoenix, AZ, April 2005.
- ENDO 2005 – 87<sup>th</sup> Annual Endocrine Society Meeting, Symposium Lecture, San Diego, CA, June 2005
- 8<sup>th</sup> Annual Targeted Therapies for the Treatment of Breast Cancer Symposium, Dana Point, CA, July 2005
- Keystone Symposium, Tissue Selective Nuclear Receptors, Breckenridge, CO, September 2005
- 16<sup>th</sup> Annual Breast Cancer Think Tank Meeting, Grand Cayman, January 2006
- Ernst Schering Foundation Symposium, Tissue-Specific Estrogen Actions: Novel Mechanisms, Novel Ligands, Novel Therapies?, Berlin, Germany, March 2006
- Keystone Symposium, Nuclear Receptors: Steroid Sisters, Banff, Canada, March 2006
- 9<sup>th</sup> Frontiers in Nuclear Receptor Action, April 2006
- Roy O. Greep Award lecture, ENDO 2006, 88<sup>th</sup> Annual Endocrine Society Mtg., Boston, June 2006
- ASCO, Development of Molecular Therapeutics in Breast Cancer, Aspen, CO, August 2006
- 12<sup>th</sup> International Congress on Hormonal Steroids and Hormones and Cancer, Plenary Lecture, Athens, Greece, September 2006
- Saint Louis University School of Medicine, Louis D'Agrosa Memorial Lecture Speaker, October 2006
- Washington University School of Medicine, Department of Oncology, October 2006
- 17<sup>th</sup> Annual Breast Cancer Think Tank Meeting, Cancun, Mexico, January 2007
- University of Virginia, Departments of Microbiology and Molecular Biology and Cancer Center, Charlottesville, February 2007
- 10<sup>th</sup> Frontiers in Nuclear Receptor Action Conference, April 2007
- EMBO Conference on Nuclear Receptors in Health and Disease, Hotel Gardone Riviera, Italy, May 2007
- International Conference on Rapid Responses to Steroid Hormones, Dublin, Ireland, September 2007

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### Page 19 – Seminars

- University of Michigan, 125<sup>th</sup> Year Celebration of the Department of Physiology, Keynote Speaker, September 2007
- 39<sup>th</sup> International Congress of Pharmacology and Experimental Therapeutics, Keynote Speaker, Sao Paulo, Brazil, October 2007
- University of Milan, Italy, Laurea ad Honorem Ceremony, Research Lecture, November 2007
- Fred Hutchinson Cancer Research Center, University of Washington, Seattle, December 2007
- 18<sup>th</sup> Annual Breast Cancer Think Tank Meeting, Kona, Hawaii, January 2008
- Keystone Conference on the Nuclear Receptor Superfamily, Plenary Symposium Talk, Whistler, Canada, March 2008
- 11<sup>th</sup> Frontiers in Nuclear Receptor Action Conference, Savannah, Georgia, April 2008
- NIH/NCI Meeting on Hormone Refractory Tumors, Bethesda, Maryland, May 2008
- Distinguished Scientist Award lecture, Clinical Laboratory Assay Society, Coral Gables, Florida, June 2008
- FASEB Conference on Extranuclear Steroid Receptors and Integration with Multiple Signaling Pathways, Carefree, Arizona, July 2008
- Nobel Conference on “Recent Advances in Understanding Estrogen Signaling: From Molecular Insights to Clinical Implications”, Keynote Speaker, Stockholm, Sweden, September 2008
- 19<sup>th</sup> Annual Breast Cancer Think Tank Meeting, Costa Rica, January 2009
- 12<sup>th</sup> Nuclear Receptor Frontiers Meeting, Sanibel, Florida, April 2009
- Gordon Research Conference on Hormone Action in Development and Cancer, Keynote Address, Holderness School, New Hampshire, July 2009
- 2<sup>nd</sup> Jensen Symposium on Nuclear Receptors, University of Cincinnati Medical Center, October 2009
- Chinese Medicinal Chemistry Symposium, Plenary Talk, Wuhan, China, October 2009
- Wuhan University, Life and Chemical Sciences Division, Wuhan, China, October 2009
- Komen Brinker Award Lecture, San Antonio Breast Cancer Symposium, San Antonio, TX, December 2009
- 20<sup>th</sup> Annual Breast Cancer Think Tank Meeting, Barbados, January 2010
- Keystone Symposium on Nuclear Receptors: Signaling, Gene Regulation, and Cancer/Nuclear Receptors: Development, Physiology and Disease, Plenary Talk, Keystone, Colorado, March 2010
- 13<sup>th</sup> Nuclear Receptor Frontiers Meeting, Philadelphia, PA, April 2010
- Ewha Women’s University, Department of Pharmaceutical Sciences, Seoul, Korea, May 2010
- 10<sup>th</sup> International Aromatase and Steroid Hormones Congress, Edinburgh, Scotland, September 2010
- 4<sup>th</sup> Great Lakes Nuclear Receptor Meeting, Keynote Speaker, Ann Arbor, MI, October 2010
- Young Survivors Breast Cancer Coalition Forum, Invited Speaker, Champaign, IL, October 2010
- Botanical Research Centers Annual Meeting, Rockville, MD, November 2012
- 21<sup>st</sup> Annual Breast Cancer Think Tank Meeting, Jamaica, January 2011
- First International Steroids Research Conference, Chicago, IL, March 2011
- 14<sup>th</sup> Nuclear Receptors Frontiers Meeting, Washington, D.C., April 2011

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### Page 20 – Seminars

- Karolisuka Symposium on Advances in Estrogen Receptor Beta Research, Keynote Speaker, Stockholm, Sweden, May 2011
- Endocrine Society Annual Meeting, Plenary Lecture, Boston, MA, June 2011
- Botanical Research Centers Annual Meeting, Wake Forest Univ., Winston-Salem, NC, Nov. 2011
- 22<sup>nd</sup> Annual Breast Cancer Think Tank Meeting, Riviera Maya, Mexico, January 2012
- Northwestern University and Medical School, Chicago, Reproductive Sciences and Endocrinology Programs, February 2012
- University of Texas Southwestern Medical School, Dallas, Reproductive Sciences and Molecular and Cellular Biology, February 2012
- University of Illinois Cancer Center, Research Forum, Chicago, Keynote Speaker, March 2012
- 15<sup>th</sup> Nuclear Receptors Frontiers Meeting, Fort Myers, FL, May 2012
- FASEB Meeting on Integration of Steroid Receptor Signaling, Snowmass, CO, July 2012
- NIEHS Distinguished Lecture Series, Research Triangle, NC, September 2012
- Botanical Research Centers Annual Meeting, NIH Bethesda, MD, November 2012
- 23<sup>rd</sup> Annual Breast Cancer Think Tank Meeting, Dominican Republic, January 2013
- AACR 104<sup>th</sup> Annual Meeting, Washington, DC, April 2013
- Botanical Research Centers Annual Meeting, Baton Rouge, LA, November 2013
- University of Pittsburgh School of Medicine, Pharmacology & Chemical Biology, November 2013
- Keystone Symposium on Nuclear Receptors: Biological Networks, Genome Dynamics and Disease, Invited Speaker, Taos, NM, January 2014
- Interdisciplinary Environmental Toxicology Seminar, University of Illinois at Urbana-Champaign, February 2014
- 18<sup>th</sup> Annual Laura Evans Memorial Breast Cancer Symposium, Sun Valley, ID, March 2014
- Endocrine Society of Australia Annual Meeting, Plenary Speaker, Melbourne, Australia, August 2014
- Cold Spring Harbor Laboratory Nuclear Receptors and Disease, Cold Spring Harbor, NY October 2014
- 25<sup>th</sup> Annual Breast Cancer Think Tank Meeting, Grand Cayman, January 2015
- Breast Cancer Research Foundation Symposium on Breast Cancer Therapy Resistance, Memorial Sloan Kettering Cancer Center, New York, NY, October 2015
- 3<sup>rd</sup> Congress on Steroid Research, Chicago, IL, November 15-18, 2015
- 26<sup>th</sup> Annual Breast Cancer Think Tank Meeting, St. Kitts, January 2016
- ENDO 2016 Annual Meeting and Expo, Symposium and Lecture, Boston, MA, April 2016
- Deans Distinguished Lecture, University of Arkansas for Medical Sciences, Little Rock, AR, April 2016
- Symposium on Estrogens and Tissue Selective Estrogen Actions in Women's Health, Pfizer, Tampa, FL, April 2016
- Seminar, Université de Toulouse Medical Center and Toulouse Cancer Center, Toulouse, France, June 22, 2016.
- Cancer Cell Signaling Seminar, Loyola Medical Center, Cardinal Bernardin Cancer Center, Chicago, IL, September 28, 2016
- 27<sup>th</sup> Annual Breast Cancer Think Tank Meeting, St. Kitts, January 2017

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**BENITA S. KATZENELLENBOGEN**

**Page 21 – Seminars**

28<sup>th</sup> Annual Breast Cancer Think Tank Meeting, Curacao, January 2018

Keynote Speaker, Computational Genomics in Cancer Workshop, Univ. of Illinois, March 2018

Symposium on Hormones and Cancer, Speaker and Session Chairperson, ENDO 2018 Annual Meeting, Chicago, IL, March 2018

AACR Annual Meeting 2018, Chicago, IL April 14-18, 2018

Seminar, University of Chicago Medicine Comprehensive Cancer Center, Chicago, IL, October 4-5, 2018

29<sup>th</sup> Annual Breast Cancer Think Tank Meeting, Riviera Maya, Mexico, January 2019

Komen Breast Cancer Foundation, Peoria, IL, February 2019

ENDO 2019 Annual Meeting and Expo, Symposium and Lecture, New Orleans, LA March 2019

NIEHS Distinguished lecture, Research Triangle, NC, May 2019

**Publications (Excluding Abstracts and Book Chapters):**

1. Katzenellenbogen, B. S., and Kafatos, F. C. Some properties of silkworm moulting gel and moulting fluid. J. Insect Physiol. 16:2241-2256, 1970.
2. Katzenellenbogen, B. S., and Kafatos, F. C. Proteinases of silkworm moulting fluid: Physical and catalytic properties. J. Insect Physiol. 17:775-800, 1971.
3. Katzenellenbogen, B. S., and Kafatos, F. C. Inactive proteinases in silkworm moulting gel. J. Insect Physiol. 17:823-832, 1971.
4. Katzenellenbogen, B. S., and Kafatos, F. C. General esterases of silkworm moulting fluid: Preliminary characterization. J. Insect Physiol. 17: 1139-1151, 1971.
5. Katzenellenbogen, B. S., and Gorski, J. Estrogen action in vitro. Induction of the synthesis of a specific uterine protein. J. Biol. Chem. 247:1299-1305, 1972. **PMID: [4335193](#)**
6. Ruh, T. S., Katzenellenbogen, B. S., Katzenellenbogen, J. A., and Gorski, J. Estrone interaction with the rat uterus: In vitro response and nuclear uptake. Endocrinology 92:125-134, 1973. **PMID: [4681918](#)**
7. Gorski, J., Katzenellenbogen, B. S., and DeAngelo, A. Gene expression as a site of estrogen action. Proceedings of the Fourth International Congress of Endocrinology. Excerpta Medica International Congress Series 273:388-393, 1973. **PMID:**
8. Katzenellenbogen, B. S., and Katzenellenbogen, J. A. Antiestrogens: Studies using an in vitro estrogen-responsive uterine system. Biochem. Biophys. Res. Comm. 50:1152-1159, 1973. **PMID: [4347895](#)**
9. Katzenellenbogen, B. S., and Williams, L. B. Uterine estrogen-induced protein: Physical and immunological comparison with ovalbumin. Proc. Natl. Acad. Sci. USA 71:1281-1285, 1974. **PMID: [4133849](#)**
10. Katzenellenbogen, B. S., and Leake, R. E. Distribution of the oestrogen-induced protein, IP, and of total protein between endometrial and myometrial fractions of the immature and mature rat uterus. J. Endocrinol. 63:439-449, 1974. **PMID: [4452816](#)**
11. Katzenellenbogen, B. S., and Greger, N. G. Ontogeny of uterine responsiveness to estrogen during early development in the rat. Mol. Cell. Endocrinol. 2:31-42, 1974. **PMID: [4455530](#)**
12. Katzenellenbogen, B. S. Synthesis and inducibility of the estrogen-induced protein, IP, during the rat estrous cycle: Clues to uterine estrogen sensitivity. Endocrinology 96:289-297, 1975. **PMID: [163181](#)**
13. Katzenellenbogen, J. A., Hsiung, H. M., Carlson, K. E., McGuire, W. L., Kraay, R. J., and Katzenellenbogen, B. S. Iodohesterols II: Characterization of the binding and estrogenic character of iodinated hexestrol derivatives, in vitro and in vivo. Biochemistry 14:1742-1750, 1975. **PMID: [164893](#)**

## Curriculum Vitae

**BENITA S. KATZENELLENBOGEN**

Page 23 – Articles in Journals

14. Katzenellenbogen, B. S., and Ferguson, E. R. Antiestrogen action in the uterus: Biological ineffectiveness of nuclear bound estradiol after antiestrogen. *Endocrinology* 97:1-12, 1975. **PMID: [166821](#)**
15. Lan, N. C., and Katzenellenbogen, B. S. Temporal relationships between hormone receptor binding and biological responses in the uterus: Studies with short- and long-acting derivatives of estriol. *Endocrinology* 98:220-227, 1976. **PMID: [174891](#)**
16. Schmidt, W. N., Sadler, M. A., and Katzenellenbogen, B. S. Androgen-uterine interaction: Nuclear translocation of the estrogen receptor and induction of the synthesis of the uterine induced protein (IP) by high concentrations of androgens *in vitro* but not *in vivo*. *Endocrinology* 98:702-716, 1976. **PMID: [177269](#)**
17. Ferguson, E. R., and Katzenellenbogen, B. S. A comparative study of antiestrogen action: Temporal patterns of antagonism of estrogen stimulated uterine growth and effects on estrogen receptor levels. *Endocrinology* 100:1242-1251, 1977. **PMID: [849721](#)**
18. Katzenellenbogen, B. S., Ferguson, E. R., and Lan, N. C. Fundamental differences in the action of estrogens and antiestrogens on the uterus. Comparison between compounds with similar duration of action. *Endocrinology* 100:1252-1259, 1977. **PMID: [849722](#)**
19. Tsai, T. L., and Katzenellenbogen, B. S. Antagonism of development and growth of 7,12-dimethylbenz(a)anthracene-induced rat mammary tumors by the antiestrogen U23,469 and concomitant effects on estrogen and progesterone receptors. *Cancer Research* 37:1537-1545, 1977. **PMID: [404032](#)**
20. Bhakoo, H. S., and Katzenellenbogen, B. S. Progesterone antagonism of estradiol-stimulated uterine "Induced Protein" synthesis. *Mol. Cell. Endocrinol.* 8:105-120, 1977. **PMID: [72697](#)**
21. Bhakoo, H. S., and Katzenellenbogen, B. S. Progesterone modulation of estrogen-stimulated uterine biosynthetic events and estrogen receptor levels. *Mol. Cell. Endocrinol.* 8:121-124, 1977. **PMID: [924010](#)**
22. Katzenellenbogen, B. S., Iwamoto, H. S., Heiman, D., Lan, N. C., and Katzenellenbogen, J. A. Stilbestrols and stilbestrol derivatives: Estrogenic potency and temporal relationships between estrogen receptor binding and uterine growth. *Mol. Cell. Endocrinol.* 10:103-113, 1978. **PMID: [564791](#)**
23. Katzenellenbogen, B. S., Katzenellenbogen, J. A., Ferguson, E. R., and Krauthammer, N. Antiestrogen interaction with uterine estrogen receptors. Studies with a radiolabeled antiestrogen (CI-628). *J. Biol. Chem.* 253:697-707, 1978. **PMID: [621199](#)**
24. Pavlik, E. J., and Katzenellenbogen, B. S. Human endometrial cells in primary tissue culture: Estrogen interactions and modulation of cell proliferation. *J. Clin. Endocrinol. Metab.* 47:333-344, 1978. **PMID: [263301](#)**
25. Katzenellenbogen, B. S., Katzenellenbogen, J. A., and Mordecai, D. Zearalenones: Characterization of the estrogenic potencies and receptor interactions of a series of fungal  $\beta$ -resorcylic acid lactones. *Endocrinology* 105:33-40, 1979. **PMID: [446414](#)**

## Curriculum Vitae

BENITA S. KATZENELLENBOGEN

Page 24 – Articles in Journals

26. Schmidt, W. N., and Katzenellenbogen, B. S. Androgen-uterine interactions: An assessment of androgen interaction with the testosterone and estrogen receptor systems and stimulation of uterine growth and progesterone receptor synthesis. Mol. Cell. Endocrinol. **15**:91-108, 1979. PMID: [499651](#)
27. Pavlik, E. J., Rutledge, S., Eckert, R., and Katzenellenbogen, B. S. Localization of estrogen receptors in uterine cells: An appraisal of translocation. Exper. Cell Res. **123**:177-189, 1979. PMID: [488181](#)
28. Katzenellenbogen, B. S., Bhakoo, H. S., Ferguson, E. R., Lan, N. C., Tatee, T., Tsai, T. L., and Katzenellenbogen, J. A. Estrogen and antiestrogen action in reproductive tissues and tumors. Recent Prog. Horm. Res. **35**:259-300, 1979. PMID: [229525](#)
29. Navickis, R. J., Dial, O. K., Katzenellenbogen, B. S., and Nalbandov, A. V. Effects of the gonadal hormones on calcium-binding proteins in the chick duodenum. Amer. J. Physiol. (Endo. Metab. and GI Physiol.) **237**:E409-E417, 1979. PMID: [227275](#)
30. Hammond, B., Katzenellenbogen, B. S., Krauthammer, N., and McConnell, J. Estrogenic activity of the insecticide Chlordecone (Kepone) and interaction with uterine estrogen receptors. Proc. Natl. Acad. Sci. U.S. **76**:6641-6645, 1979. PMID: [93289](#)
31. Tsai, R. L., Rutledge S., and Katzenellenbogen, B. S. Antiestrogen modulation of the growth and properties of ovarian dependent and ovarian-independent mammary tumors in rats. Cancer Res. **39**:5043-5050, 1979. PMID: [227594](#)
32. Navickis, R. J., Katzenellenbogen, B. S., and Nalbandov, A. V. Effects of the sex steroid hormones and vitamin D<sub>3</sub> on calcium-binding protein in the chick shell gland. Biology of Reproduction **21**:1153-1162, 1979. PMID: [229921](#)
33. Tatee, T., Carlson, K. E., Katzenellenbogen, J. A., Robertson, D. W., and Katzenellenbogen, B. S. Antiestrogens and antiestrogen metabolites: Preparation of tritium-labeled U-23469 and characterization and synthesis of a biologically-important metabolite. J. Med. Chem. **22**:1509-1517, 1979. PMID: [536996](#)
34. Katzenellenbogen, B. S. Dynamics of steroid hormone receptor action. Ann. Review Physiol. **42**:17-35, 1980. PMID: [6996577](#)
35. Katzenellenbogen, B. S., Lan, N. C., and Rutledge, S. K. Estrogen receptors of human endometrium: Characterization of nuclear and cytoplasmic forms and comparisons with rat uterine receptors. J. Steroid Biochem. **13**:113-122, 1980. PMID: [7382488](#)
36. Rorke, E. A., and Katzenellenbogen, B. S. Comparative effects of estrogen and antiestrogens on enzyme activities in R3230AC rat mammary tumors and uteri of tumor-bearing animals. Cancer Res. **40**:3158-3162, 1980. PMID: [6253055](#)
37. DeBoer, W., Notides, A. C., Katzenellenbogen, B. S., Hayes, J. R., and Katzenellenbogen, J. A. The capacity of the antiestrogen CI-628 to activate the estrogen receptor in vitro. Endocrinology **108**:206-212, 1981. PMID: [7007019](#)



## Curriculum Vitae

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Page 25 – Articles in Journals

38. Pavlik, E. J., and Katzenellenbogen, B. S. Stability of the uterine estrogen receptor when complexed with estrogens or antiestrogens. Mol. Pharmacol. **18**:406-412, 1980. **PMID: [7464805](#)**
39. Hayes, J. R., Rorke, E. A., Robertson, D. W., Katzenellenbogen, B. S., and Katzenellenbogen, J. A. Biological potency and uterine estrogen receptor interactions of the metabolites of the antiestrogens CI628 and U23,469. Endocrinology **108**:164-172, 1981. **PMID: [7007017](#)**
40. Kneifel, M. A., and Katzenellenbogen, B. S. Comparative effects of estrogen and antiestrogen on plasma renin substrate levels and hepatic estrogen receptors in the rat. Endocrinology **108**:545-552, 1981. **PMID: [7004858](#)**
41. Katzenellenbogen, B. S., Pavlik, E. J., Robertson, D. W., and Katzenellenbogen, J. A. Interaction of a high affinity antiestrogen ( $\alpha$ -[4-pyrrolidinoethoxy]phenyl-4-hydroxy- $\alpha'$ -nitrostilbene, CI628M) with uterine estrogen receptors. J. Biol. Chem. **256**:2908-2915, 1981. **PMID: [7204382](#)**
42. Eckert, R. L., and Katzenellenbogen, B. S. Human endometrial cells in primary tissue culture. Modulation of the progesterone receptor level by natural and synthetic estrogens in vitro. J. Clin. Endocrinol. Metab. **52**:699-708, 1981. **PMID: [7204540](#)**
43. Rorke, E. A., and Katzenellenbogen, B. S. Antitumor activities and estrogen receptor interactions of the metabolites of the antiestrogens C1628 and U23,469 in the dimethylbenz(a)anthracene-induced rat mammary tumor system. Cancer Research, **41**:1257-1262, 1981. **PMID: [6783294](#)**
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249. Madak-Erdogan, Z., Charn, T.H., Jiang, Y., Liu, E.T., Katzenellenbogen, J.A. and Katzenellenbogen, B.S. Integrative genomic analysis delineating combinatorial specification of gene regulation and metabolism through estrogen receptors  $\alpha$  and  $\beta$  and coregulators in breast cancer cells. Keystone Meeting - Tumor Metabolism (X4) joint with the meeting on PI 3-Kinase and Interplay with Other Signaling Pathways (X3) Keystone, CO February 24—Mar 1, 2013
250. Madak-Erdogan, Z., Bergamaschi, A., Ventrella, R., Lu, H., and Katzenellenbogen, B.S. Estrogen Receptor- $\alpha$  Dictates the Subcellular Localization of ERK5 to Control Differential Proliferation and Invasion Programs of Breast Cancer Cells. AACR 104th Annual Meeting, Washington, D.C., April 6-10, 2013.
251. Bergamaschi, A., Madak-Erdogan, Z., Lu, H., and Katzenellenbogen, B.S. Genome-wide analysis of FOXM1 binding and involvement of FOXM1 in cancer stem cell and metastasis properties of endocrine-sensitive and resistant breast cancer cells. AACR 104th Annual Meeting, Washington, D.C., April 6-10, 2013.
252. Holton, S.E., Bergamaschi, A., Katzenellenbogen, B.S., and Bhargava, R. Mammary fibroblasts induce hormone-independent growth in Estrogen Receptor-positive breast cancer cells via an epithelial-to-mesenchymal transition in a 3D cell culture model. AACR 104th Annual Meeting, Washington, D.C., April 6-10, 2013.

253. Zhao, Y., Gong, P., Chen, U., Bagchi, M.K., Taylor, R.N., Nettles, K.W., Katzenellenbogen, J.A. and Katzenellenbogen, B.S. Novel Estrogen Receptor Ligands with Anti-estrogenic and Anti-inflammatory Activity for Prevention and Treatment of Endometriosis: Studies in a Mouse Model. ENDO 2013: The 95th Annual Meeting & Expo, San Francisco, CA, June 2013.
254. Zhao, Y., li, Q., Katzenellenbogen, B.S., Taylor, R.N., Bagchi, I.C. and Bagchi, M.K. Estrogen-Induced Expression of CCN1 is Critical for Vascular Network Formation during Establishment of Endometriosis-like Lesions in a Mouse Model ENDO 2013: The 95th Annual Meeting & Expo, San Francisco, CA, June 2013.
255. Adlanmerini, M., Péqueux, C., Raymond-Letron, I., Hoon Kim, S., Boudou, F., Blacher, S., Foidart, J.M., Katzenellenbogen, B.S., Katzenellenbogen, J.A., Arnal, J.F., and Lenfant, F. Genomic effects of estrogen receptor alpha (ER $\alpha$ ) are required for angiogenesis to increase the growth of ER $\alpha$ -negative tumors. EMBO Meeting on Nuclear receptors: Linking molecules, genomes & physiology, Sorrente, Italy. Sept. 2013.
256. Zhao, Y., Gong, P., Chen, Y., Bagchi, M.K., Taylor, R.N., Nettles, K.W., Katzenellenbogen, J.A. and Katzenellenbogen, B.S. Suppression of Endometriosis by Targeting Estrogenic and Inflammatory Pathways: Studies in a Mouse Model. Illinois Symposium on Reproductive Sciences, Carbondale, IL, October 13-15, 2013.
257. Katzenellenbogen, B. S. Madak Erdogan, Z., Bergamaschi, A., Gong, P., and Katzenellenbogen, J. A. Integrative Genomics of Gene and Metabolic Regulation by Estrogen Receptors and Collaborating Partners. Keystone Symposium, Nuclear Receptors: Biological Networks, Genome Dynamics and Disease, Taos, NM, January, 2014.
258. Madak-Erdoğan, Z., El-Ashry, D., and Katzenellenbogen, B. S. ERK2 Functional Chromatin Footprints in Patient-Derived Breast Tumor Cells Predict Molecular Subtype, Clinical Outcome, and Drug Response in Breast Cancers, American Association for Cancer Research Annual Meeting, San Diego, CA, April 2014.
259. Zhao Y, Chen Y, Gong P, Bagchi MK, Taylor RN, Katzenellenbogen JA and Katzenellenbogen BS. Multiple Beneficial Roles of Repressor of Estrogen Receptor Activity (REA) in Suppressing Endometriosis Progression. ICE/ENDO 2014: The 16th International Congress of Endocrinology, Chicago, IL, June 2014.
260. Gong P, Madak-Erdoğan Z, Katzenellenbogen JA, Flaws J, and Katzenellenbogen BS. Cross-talk between the Aryl Hydrocarbon Receptor and Estrogen Receptor Mediates the Effects of Botanical Estrogens on Gene Expression, Cell Metabolism, and Behavior of Target Cells. ICE/ENDO 2014: The 16th International Congress of Endocrinology, Chicago, IL, June 2014.
261. Gong P, Madak-Erdoğan Z, Li J, Cheng J, Greenlief CM, and Katzenellenbogen BS. Transcriptome Analyses Reveal Distinct Patterns of Gene Regulation by Different Botanical Estrogens in Dietary Supplements. ICE/ENDO 2014: The 16th International Congress of Endocrinology, Chicago, IL, June 2014.
262. Katzenellenbogen BS, Madak-Erdoğan Z, Bergamaschi A, Gong P, and Katzenellenbogen JA. Estrogen Receptor Integrative Genomics and Signaling Networks in Breast Cancer and Endocrine Resistance. Plenary Lecture. Endocrine Society of Australia, Melbourne, Australia, August 2014.

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263. Katzenellenbogen BS, Madak- Erdoğan Z, Bergamaschi A, Gong P, Chen Y, Zhao Y, Bindman N, and Katzenellenbogen JA. Estrogen Receptor Integrative Genomics and Signaling Networks in Breast Cancer and Endocrine Resistance. Cold Spring Harbor Meeting, Nuclear Receptors in Disease, October 2014.

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**BENITA S. KATZENELLENBOGEN**

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264. Zhao Y, Li Q, Gong P, Chen Y, Lau LF, Nettles KW, Korach KS, Ko C, Taylor RN, Bagchi IC, Katzenellenbogen JA, Bagchi MK and Katzenellenbogen BS. Suppression of Endometriosis by Targeting the Estrogen-Angiogenesis-Inflammation Axis: Studies in a Mouse Model. The 3<sup>rd</sup> State Key Laboratory of Reproductive Biology (SKLRB) Symposium on Reproductive Biology, Beijing, China, October 2014.
265. Madak-Erdoğan Z and Katzenellenbogen BS. Systems Biology of Gene Regulation by Estrogen Receptors and Kinases in Breast Cancer. ENDO 2015: The 97th Annual Meeting & Expo, San Diego, CA, March 5-8, 2015.
266. Zhao Y, Chen Y, Bagchi MK, Taylor RN, Nettles KW, Katzenellenbogen JA, and Katzenellenbogen BS. Suppression of Endometriosis by Interrupting Crosstalk between the Endometriotic Lesion and the Host Immune System. ENDO 2015: The 97th Annual Meeting & Expo, San Diego, CA, March 5-8, 2015.
267. Madak-Erdoğan Z and Katzenellenbogen BS. Estrogen Receptor (ER) and ERK5 Signaling Collaborates to Modulate the Tumor Microenvironment in Breast Cancer. AACR 106<sup>th</sup> Meeting, Philadelphia, PA, April 2015.
268. Madak-Erdoğan Z. and Katzenellenbogen BS. Systems Biology of Gene Regulation by Estrogen Receptors and ERK5 Signaling in Breast Cancer. FASEB 2015 Meeting: “Molecular and Systems Integration of Genomic and Nongenomic Steroid Hormone Action” Big Sky, MT, Aug. 9-14, 2015.
269. Katzenellenbogen, J.A., Madak-Erdogan, Z., Kim, S.H., Tiwari-Woodruff, S., Katzenellenbogen, B.S., Multiple Modes for Selective Action of Diverse Ligands through the Estrogen Receptors, FASEB Meeting on Molecular and Systems Integration of Genomic and Nongenomic Steroid Hormone Action, August 9-14 2015, Big Sky, MT
270. Katzenellenbogen JA, Katzenellenbogen BS, Zhao Y, Josan JS, Pollock JA, Norris JD, McDonnell DP, and Tiwari-Woodruff S. Novel Ligands for Estrogen Receptor and Androgen Receptor Targeted Therapies. Keystone Meeting, Snowbird, Utah, Jan. 2016.
271. Chen K, Zhao YC, Hieronymi K, Katzenellenbogen JA, Katzenellenbogen BS, Madak-Erdoğan Z. Molecular Mechanisms of Low Affinity Estrogen Action in Obese Mouse Models. Keystone Meeting, Snowbird, Utah, Jan. 2016.
272. Zhao YC, Katzenellenbogen JA, Katzenellenbogen BS, Madak-Erdoğan Z. Prevention of Obesity-Related Breast Cancer using Pathway Preferential Estrogens. Keystone Meeting, Snowbird, Utah, Jan. 2016.
273. Madak-Erdoğan Z, Zhao YC, Chen K, Hieronymi K, Ki SH, Gong P, Zhang H, Chambliss KL, Shaul P, Katzenellenbogen JA, Katzenellenbogen BS, Wrobel K, Kulkoyluoglu E. Systems Biology of Gene and Metabolic Regulation by Estrogen Receptors and Kinases in Breast Cancer and Metabolic Disease. Keystone Meeting, Snowbird, Utah, Jan. 2016.
274. Christenson JL, Butterfield KT, Spoelstra NS, McDonnell DP, Norris J, Josan J, Pollock J4, Katzenellenbogen BS, Katzenellenbogen JA, Richer JK. MMTV-PyMT and the Met-1 derived line as immunocompetent models of androgen receptor-positive triple-negative breast cancer. Keystone Meeting, Snowbird, Utah, Jan. 2016.

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275. Selvaraj UM, Plautz E, Chambliss K, Kong X, Rovinsky S, Zhang S, Tegene M, Ortega SB, Mineo C, Katzenellenbogen BS, Katzenellenbogen JA, Kim SH, Shaul P, Stowe AM. Selective Non-Nuclear Estrogen Receptor Activation Decreases Stroke Severity and Promotes Functional Recovery after Stroke in Mice. 9th International Symposium on Neuroprotection and Neurorepair (ISN&N), Leipzig, Germany, April 19-22, 2016.
276. Katzenellenbogen BS. Estrogen Receptor Genomics and Signaling Pathway and Microenvironment Rewiring in Breast Cancer and Endocrine Resistance. ENDO 2016: The 98th Annual Meeting & Expo, Symposium Talk, Boston, MA, April 1-4, 2016.
277. Katzenellenbogen BS, Zhao Y, and Madak-Erdogan Z. TSEC Studies in Endometriosis and in Breast Cancer. Estrogens, SERMs, and TSECs Scientific Advisory Meeting, Clearwater Beach, FL, April 20-22, 2016.
278. Kim SH, Madak-Erdogan Z, Katzenellenbogen BS, Katzenellenbogen JA. Selective Activation of the Extranuclear-Initiated Functions of the Estrogen Receptor: A New Approach to Beneficial Patterns of Estrogen Action. American Chemical Society Meeting, Philadelphia, PA, Aug. 2016
279. Chambliss KL, Sacharidou A, Madak-Erdogan Z, Katzenellenbogen BS, Katzenellenbogen JA, Mineo C, Shaul PW. Metabolic Actions of Non-nuclear Estrogen Receptors. RRSB - Rapid Responses to Steroid Hormones. Richmond, VA November 2016
280. Selvaraj UM, Plautz EJ, Chambliss KL, Kong X, Rovinsky S, Zhang S, Mineo C, Katzenellenbogen BS, Katzenellenbogen JA, Kim SH, Shaul PW, and Stowe AM. Selective Non-Nuclear Estrogen Receptor Activation Decreases Stroke Severity and Promotes Functional Recovery After Stroke in Mice. Berlin Brain 2017 Meeting, Berlin, Germany, April 2017
281. Zhao Y, Guillen VS, Laws M, Ziegler Y, Gong P, Min J, Sharma A, Kim SH, Chu D, Park BH, Oesterreich S, Shapiro DJ, Nettles KW, Katzenellenbogen JA, and Katzenellenbogen BS. Constitutively Active Mutant Estrogen Receptors in Breast Cancer Show Differential Responsiveness to Structurally Novel Antiestrogens. ENDO 2017: The 99th Annual Meeting & Expo, Orlando, FL, April 1-4, 2017.
282. Guillen VS, Sharma A, Toy W, Sharma N, Min J, Carlson KE, Greene GL, Chandarlapaty S, Katzenellenbogen BS, and Katzenellenbogen JA. Inhibition of Constitutively Active Mutant Estrogen Receptors in Breast Cancer: Roles of Antiestrogen Ligand Core and Side Chain. ENDO 2018: The 100th Annual Meeting & Expo, Chicago, IL, March 2018.
283. Laws MJ, Kim SH, Min J, Zhao Y, Ziegler Y, Chu D, Park BH, Katzenellenbogen JA, and Katzenellenbogen BS. Suppression of breast cancer metastasis and extension of host animal survival by a new adamantyl antiestrogen, K-07, in a pre-clinical breast cancer metastasis model driven by constitutively active mutant estrogen receptors. AACR 109th Meeting, Chicago, IL, April 2018.
284. Laws MJ, Kim SH, Ziegler Y, Bindman N, Gong P, Guillen VS, Yasuda M, Singh D, El-Ashry D, Katzenellenbogen JA, and Katzenellenbogen BS. Suppression of hormone receptor-positive and triple negative breast cancers by new inhibitors of the transcription factor FOXM1. AACR 109th Meeting, Chicago, IL, April 2018.
285. Katzenellenbogen BS, Guillen VS, Ziegler Y, Kim SH, Laws MJ, Zhao Y, Yasuda MA, Li Z, El-Ashry D, Katzenellenbogen JA. New inhibitors of the transcription factor FOXM1 and their

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**BENITA S. KATZENELLENBOGEN**

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actions in suppression of breast cancer and endocrine resistance. San Antonio Breast Cancer Symposium, 2018. San Antonio, TX, Dec 4-8, 2018.

286. Katzenellenbogen JA, Min J, Kim SH, Laws MJ, Zhao Y, Ziegler Y, Nelson ER, Shahoei SH, Chu D, Park BH, Katzenellenbogen BS. Adamantyl-core antiestrogens: Estrogen receptor antagonists that suppress breast cancer growth and metastasis, and extend host animal survival in a pre-clinical breast cancer metastasis model driven by constitutively active mutant estrogen receptors. San Antonio Breast Cancer Symposium, 2018. San Antonio, TX, Dec 4-8, 2018.
287. Chambliss KL, Selvaraj UM, Konaniah ES, Menazza S, Sun J, Madak-Erdogan Z, Kim SH, Katzenellenbogen BS, Katzenellenbogen JA, Hui DY, Murphy E, Stowe AM, Mineo C, Shaul PW. Manipulating Extra-nuclear Estrogen Receptor Biology to Combat Cardiometabolic Disease. Rapid Responses to Steroid Hormones Meeting, 2018. RRSB 2018 Dublin, Ireland.
288. Zuo, Q, Katzenellenbogen BS. Pathway Preferential Estrogens Prevent Hepatosteatosis Due to Ovariectomy and High-Fat Diets. ENDO 2019: The 101<sup>st</sup> Annual Meeting & Expo, New Orleans, LA, March 2019.

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Page 88 – Graduate Students and Postdoctoral Associates

### Names and Positions of Former Graduate Students and Postdoctoral Associates

#### **Ph.D. Students of Benita Katzenellenbogen**

Gary Coffman	Ph.D. 1974	Professor, Department of Biology Webster University, St. Louis, MO
Evan R. Ferguson	Ph.D. 1976	Past Director, Sigma Xi Raleigh, NC (now deceased)
Hemlata Sehgal Bhakoo	Ph.D. 1976	Director, IVF Andrology Laborator 4510 Main Street, Snyder, NY
Roberta J. Navickis	Ph.D. 1978	Partner, Hygeia Associates, Biomedical Consulting Company, Grass Valley, CA
Warren N. Schmidt	Ph.D. 1978 M.D. 1989	Professor, Department of Internal Medicine, University of Iowa College of Medicine, Iowa City, Iowa
Richard L. Eckert	Ph.D. 1981	John F.B. Weaver, Professor and Chair, University of Maryland School of Medicine, Department of Biochemistry and Molecular Biology, Baltimore, MD
James R. Hayes	Ph.D. 1982 M.D. 1988	Adjunct Professor, Department of Ob-Gyn, Medical College of Wisconsin, and private practice, Milwaukee, WI
Lisa L. Wei	Ph.D. 1984	Special Advisor to the Office of the Director NEI (National Institutes of Health) Biotechnology Washington, DC
Alaka Mullick	Ph.D. 1986	Senior Scientist, Cancer Institute, University of Montreal Montreal, Canada
Yhun Yhong Sheen	Ph.D. 1986	Professor and Head of Dept., Ewa Women's University, Department of Pharmacology, Seoul, Korea
Thomas W. Toney	Ph.D. 1986	Professor, Department of Biology Georgia College Milledgeville, GA



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Kari L. Kendra	Ph.D. 1987 M.D. 1992	Professor in Hematology and Oncology, Ohio State University, Medical School, Columbus, OH
Jonathan F. Elliston	Ph.D. 1987	Biotechnology Patents, Baylor College of Medicine, Houston, TX
Ann M. Nardulli	Ph.D. 1987	Professor, Dept. of Molecular and Integrative Physiology, University of Illinois, Urbana, IL
Linnea R. (Read) Boyev	Ph.D. 1990, M.D. 1993	Adjunct Faculty, Division of Health and, Sciences and School of Nursing, Oakton Community College, Des Plaines, IL
Joseph C. Reese, Jr.	Ph.D. 1992	Professor Dept. of Biochemistry & Molecular Biol., Pennsylvania State University, College Station, PA
Hyeseong Cho	Ph.D. 1992	Professor and Chairperson, Department of Biochemistry, Ajou University School of Medicine, Suwon, Korea
Susan M. Aronica	Ph.D. 1993	Professor and Head Dept. of Biology, Canisius College, Buffalo, NY (deceased 2016)
William Lee Kraus Green	Ph.D. 1994	Director and Professor, Cecil H & Ida  Center for Reproductive Biology Sciences, Professor & Chair for Basic Science, Dept. of Ob/Gyn, Professor, Department of Pharmacology, University of Texas Southwestern Medical Center at Dallas, Dallas, TX
B. Avery Ince	Ph.D. 1994, M.D. 1997	Vice President, Clinical Development and Medical Affairs, Janssen Pharmaceuticals, Johnson & Johnson, Beijing, China
Mary E. Herman	Ph.D. 1995	Faculty member, Medical School Penang, Malaysia
Eileen M. McInerney	Ph.D. 1997	Research Scientist, UCSD, La Jolla, CA

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**Page 90 – Graduate Students and Postdoctoral Associates**

James A. Thomas	Ph.D. 2000	Research Scientist, AIDS Vaccine Program SAIC-Frederick, Inc. National Cancer Institute Frederick, MD
Tracy R. Ediger	Ph.D. 2002 M.D. 2003	Residency in Gastroenterology, Harvard Medical School, Boston, MA now Physician and Research, Pediatric Gastroenterology & Hepatology & Nutrition Nationwide Children's Hospital 700 Children's Dr., Columbus, OH
Jun Sun	Ph.D. 2002	Senior Scientist Braman Breast Cancer Institute Univ. of Miami Medical Center Miami, FL
Ramji R. Rajendran	Ph.D. 2002 M.D. 2005	Residency in Radiation Oncology, Univ. of Pennsylvania Medical Center, Philadelphia, PA, now Physician at Chicago Area Cancer Care, Radiation Oncology Consultants, Chicago, IL
Seongeun Park	Ph.D. 2004	Senior Scientist and Director of Core Laboratories Samsung Biomedical Research Institute School of Medicine, Sungkyunkwan University, Suwon, Korea
William Harrington	Ph.D. 2005	University of Toronto Toronto, Canada
Edmund Chang	Ph.D. 2007	Senior Scientist Baylor College of Medicine, Center for Gene Therapy, Genome Center, Houston, TX; now Scientist at Kite Pharma, Santa Monica, CA
Joshua Stender	Ph.D. 2007	Senior Scientist II, AbbVie Pharmaceuticals, Inc. North Chicago, IL
Shubin Sheng	Ph.D. 2007	Biostatistician Duke Clinical Research Institute, Raleigh-Durham, NC
Zeynep Madak-Erdogan	Ph.D. 2009	Assistant Professor University of Illinois, Department of Food Science and Human Nutrition

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Urbana, IL

Daniel Barnett	Ph.D. 2010 M.D. 2011	Resident in Radiation Oncology University of Wisconsin, Madison School of Medicine and Public Health Madison, WI; currently Radiology physician at Carle Foundation Hospital and Assistant Professor at Univ. of Illinois College of Medicine, Urbana, IL
Shweta Bhatt	Ph.D. 2010	Director – Medical Innovation and Clinical Diagnostics, Daksh Med Ventures Inc., New Delhi, India
Cory Funk	Ph.D. 2010	Senior Scientist Institute for Systems Biology University of Washington, Seattle, WA
Kyuri Kim	Ph.D. 2011	Senior Scientist Stanford Research Institute (SRI) International, Palo Alto, CA
Sung-Hee Park	Ph.D. 2011	Postdoctoral Scientist DOD Postdoctoral Breast Cancer Fellowship Duke University Medical Center Dept of Pharmacology & Cancer Biology Chapel Hill, NC
Nittaya Boonmuen	Ph.D. 2016	Ph.D. Department of Physiology, Mahidol University, Rama 6 road, Bangkok 10400 Thailand
Valeria Sanabria Guillen	2016 -	BS 2015 Brown University

### **M.S. Students of Benita Katzenellenbogen**

Mary LeNoble Schrage	M.S. 1978	High School Science Teacher, Columbia, MO
Mark A. Kneifel	M.S. 1980	Veterinary Medical Group Practice, Wappingers Falls, NY
Norman Peterson	M.S. 1985	University of Washington Veterinary Medical School, Seattle, WA; Clinical Practice

**Curriculum Vitae****BENITA S. KATZENELLENBOGEN****Page 92 – Graduate Students and Postdoctoral Associates**

Jeffrey Duncan	M.S. 1987	Scientist, Merck, Sharp & Dohme, Saint Louis, MO
Kimberly McMahon Hines	M.S. 1988	Senior Scientist, Pierce Chemical Company, Rockford, IL
Caroline Koppi	M.S. 1989 M.D. 1993	University of Illinois Medical School, Chicago, IL; Clinical Practice
Peter A. Ng	M.S. 1991	Unknown
Henry Fang	M.S. 1992 M.D. 1996	M. D. Medical Practice Los Angeles, CA
Heather Herbolsheimer	M.S. 1994	Medical Student, Chicago, IL
Chih-Yang Huang	M.S. 1995	Assistant Professor, Taiwan
Anne Keller	M.S. 1995	Research Associate, Abbott Laboratories, North Chicago, IL
Emily Gramling	M.S. 1997	Research Associate, Northwestern University Med. School, Chicago, IL

**Postdoctoral Associates and Visiting Scientists of Benita Katzenellenbogen**

Nancy L. Lan	1974-1976	(Ph.D., Kent State University) Associate Professor, Cal. Tech., Department of Pharmacology, Pasadena, CA
Ten-lin S. Tsai	1975-1978	(Ph.D., University of Illinois) Senior Scientist, Argonne National Laboratory, Batavia, IL
Edward J. Pavlik	1976-1979	(Ph.D., University of Tennessee) Prof., Dept of Ob/Gyn, Director, Basic Research in Gyn Oncology, Chandler Medical Center, University of Kentucky, Lexington
Tochiro Tatee	1978-1980	(Ph.D., Japan) Research Chemist, Takada Chemical Co., Tokyo, Japan
Ellen A. Rorke	1980-1983	(Ph.D., University of California, Riverside) Professor, Department of Environmental Health Sciences, Case Western Reserve University, Cleveland, OH

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**Page 93 – Graduate Students and Postdoctoral Associates**

James R. Hayes	1982-1983	(Ph.D., University of Illinois, Urbana, M.D. Creighton Medical College) Adjunct Professor, Department of Ob/Gyn, Medical College of Wisconsin, Milwaukee, and Group Practice in Ob/Gyn
Katsuichi Sudo	1982-1984	(Ph.D., Japan) Head, Biology Department, Takeda Pharmaceutical Company, Osaka, Japan
Margaret A. Miller	1982-1985	(Ph.D., University of Wisconsin, Madison), Office on Women's Health, U.S. Food and Drug Administration, Rockville, MD
Georg C. A. Reiner	1983-1985	(M.D., University of Vienna) and 1987 Professor, Department of Surgery, University of Vienna Medical School, Austria
Yolande Berthois	1985-1987	(Ph.D., University of Marseilles, France), Research Scientist, Laboratoire de Cancerologie experimentale, Faculte de Medicine Secteur Nord, Marseilles, France
Angelika Reiner	1987	(M.D., Austria) s Professor, Department of Pathology, University of Vienna Medical School, Austria
Christine A. Weaver	1986-1987	(Ph.D., University of Illinois, Carle Clinic Physician and Head Genetics Laboratory, Urbana, IL
Catherine E. Snider	1986-1988	(Ph.D., Ohio State University) Senior Scientist, Proctor and Gamble, Cincinnati, OH
Kenneth W. Harlow	1988-1990	(Ph.D., University of Illinois) Associate Professor, Institute for Biochemical Genetics, University of Copenhagen, Denmark
Carol K. Wrenn	1988-1992	(Ph.D., University of Indiana) Senior Scientist, Eastman-Kodak, Rochester, NY
Cynthia H. Wooge	1989-1992	(Ph.D., University of Iowa) Senior Scientist, Sigma Chemical Co., St. Louis, MO

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Farzad Pakdel	1989-1991	(Ph.D., University of Rennes, France), Professor, University of Rennes, France
Pascale LeGoff	1990-1992	(Ph.D., University of Rennes, France) Associate Professor, University of Rennes, France
Volkmar Müller	1993	(M.D., University of Hamburg Medical School, Hamburg, Germany) Professor, Gynecological Oncology, University of Hamburg Medical Center, Hamburg, Germany
Nariaki Fujimoto	1992-1994	(Ph.D., Hiroshima University Japan) Professor, Hiroshima Univ. Cancer Research Institute, Japan
Bhavna Bhardwaj	1992-1995	(M.D., Postgraduate Institute of Medical Education and Research, India), University of Florida, Gainesville, Cancer Center
David Schodin	1992-1996	(Ph.D., University of Illinois) Biotechnology Patents, Leydig, Voit and Mayer, Chicago, IL
Monica Montano	1993-1998	(Ph.D., University of Missouri) Professor, Dept. of Pharmacology, Case Western Reserve Univ., Cleveland, Ohio
Kirk Ekena	1994-1998	(Ph.D., University of Oregon) Director of Intellectual Property at Arrowhead Research Corporation, Madison, WI
Gwendal Lazennec	1996-1998	(Ph.D., University of Rennes, France), Associate Professor, INSERM U148, “Hormones and Cancer”, Montpellier, France
Dennis M. Kraichely	1999-2000	(Ph.D., St. Louis University School of Medicine, MO), Associate Director, CMC Team Leader Portfolio Management & Technical Integration, Johnson & Johnson Pharmaceutical Research & Development, Malvern, PA
Regis Delage-Mourroux	1998-2000	(Ph.D., University Pierre et Marie Curie and INSERM Unit 139, Paris, France),

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		Professor, University of France - Comte, Besancon, France
Inho Choi	1996-2001	(Ph.D., University of Florida) Professor, Yeungnam University, Kyungsan City, Korea
Paolo Martini	1998-2001	(Ph.D., University of Milan, Italy) Chief Scientific Officer, Head of Discovery,,Elpidera Moderna Therapeutics, Cambridge, MA
Rashna D. Balsara	2000-2002	(Ph.D., University of Bombay, India), Research Scientist, Keck Transgene Center, Notre Dame University, IN
Deshanie Ganessunker Rai	2000-2003	(Ph.D, University of Illinois at Urbana-Champaign), Senior Associate Director, Bayer HealthCare, Whippany, NJ
Jonna Frasor	2001-2005	(Ph.D., University of Illinois at Chicago), Professor, Dept. of Physiology and Biophysics, University of Illinois College of Medicine, Chicago, IL
Fabio Stossi	2002-2011	(Ph.D., University of Milan, Italy), Assistant Professor, Baylor College of Medicine, Dept. of Molecular & Cellular Biology, Houston, TX
P. Mangala Gowri	2003-2008	(Ph.D., University of Cincinnati Medical Center), Visiting Research Scholar
Surojeet Sengupta	2003-2006	(Ph.D., Central Drug Research Institute, Lucknow, India), Senior Scientist, Georgetown University Medical School, Lombardi Cancer Center, Washington, DC
Seongeun Park	2004-2006	(Ph.D., University of Illinois at Urbana-Champaign), Director, Research Core Laboratory, Samsung Biomedical Research Institute, School of Medicine, Sungkyunkwan University, Suwon, Korea
Chang-Hun Lee	2007-2009	(Ph.D., Seoul National University, Seoul, Korea), Senior Scientist, Department of Biochemistry, University of Wisconsin, Madison

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Anna Bergamaschi	2007-2013	(Ph.D., Institute for Cancer Research, Norwegian Radium Medical Center, Oslo, Norway), Senior Research Scientist, Genomic Health, Inc., Redwood City, CA;
Yuechao Zhao	2008-2017	(Ph.D., Northeast Agricultural University, Harbin, China), Senior Scientist, MI Bioresearch, Ann Arbor, Michigan; now Enanta Pharmaceuticals, Boston, MA
Zeynep Madak-Erdogan	2009-2014	(Ph.D., University of Illinois, Urbana, IL), Assistant Professor, Department of Food Science and Human Nutrition, University of Illinois at Urbana - Champaign
Yan Jiang	2010-2012	(M.D./Ph.D., Purdue University, West Lafayette, IN), Medical Residency, New York University Medical Center, NY
Man-Sau Wong	Summer 2011	Visiting Professor from The Hong Kong Polytechnic University, Hong Kong
Ping Gong	2011-2016	(Ph.D., Illinois State University, Bloomington, IL; Postdoc, Univ. of Chicago) Research Scientist, Baylor College of Medicine, Houston, TX
Hailing Lu	2012-2013	(M.D., Harbin Medical University, Harbin, China) Visiting Research Scientist Currently Staff Physician and Scientist, Harbin Medical University, Medical Oncology, Harbin, China
Wenwen Lu	2013-2015	(Ph.D., Institute of Epigenetics & Cancer Research School of Medicine, Tsinghua University, Beijing, China), Postdoctoral Scientist
Yiru Chen	2013-2015	(Ph.D., Univ. of Michigan), Postdoctoral Scientist, currently Medical Genetics Counselor, Boston, MA
Mary Jo Laws	2014-2018	(Ph.D., Univ. of Illinois) Postdoctoral Scientist
Jean-Francois Arnal, MD, Ph.D.	2015, Oct-Nov.	Visiting Professor from INSERM Université de Toulouse III, Toulouse, France
Parama Dey	2018-Present	(Ph.D. Univ. of Nebraska Medical Center) Postdoctoral Research Associate



**Curriculum Vitae**

**BENITA S. KATZENELLENBOGEN**

**Page 97 – Graduate Students and Postdoctoral Associates**

Shunchao Yan, MD, Ph.D.	2019-2020	Visiting Scholar from Department of Oncology, Shengjing Hospital, China Medical University, Shenyang , 110022, China.
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**Undergraduate Research Students in Benita Katzenellenbogen's Laboratory**

Over 50 undergraduate University of Illinois students and several visiting undergraduate summer students from other universities and colleges have done undergraduate research in Benita Katzenellenbogen's laboratory. Current students are Mayuri Yasuda and Chirag Gopanath.