

BIOGRAPHICAL SKETCH			
NAME Bonnie S. Dunbar, Ph.D.		POSITION TITLE Visiting Scientist, University of Nairobi, Department of Biotechnology and Bioinformatics	
EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Colorado, Boulder	B.A.	1970	Zoology
University of Colorado, Boulder	M.A.	1971	Physiology
University of Tennessee, Knoxville	Ph.D.	1977	Zoology
University of California, Davis	Postdoc	1978	Biochemistry and Biophysics

A. Positions and Honors

Professional Appointments

- 1971-1973 Scientist, Oceanography Mariculture, Inc. West Palm Beach, Florida.
- 1973 -1975 Staff Scientist, The Harbor Branch Foundation, Smithsonian Institution Marine Laboratory, Fort Pierce, Florida
- 1978-1981 Staff Scientist, The Population Council, The Rockefeller University, New York, New York.
- 1981-1984 Assistant Professor, Department of Cell Biology, Baylor College of Medicine, Houston, Texas.
- 1984-1994 Associate Professor, Department of Cell Biology and Department of Obstetrics and Gynecology, Baylor College of Medicine, Houston, Texas.
- 1994-Present Professor, Department of Molecular and Cellular Biology, Baylor College of Medicine, Houston, Texas (Adjunct Professor since 2002)
- 2001-2002 Fulbright Scholar to Africa (Kenya), August 2001 to 2002
- 2002 Honorary Lecturer, University of Nairobi, Nairobi, Kenya
- 2004-present Treasurer and Founding Member, African Biomedical Center, Karen (Nairobi) Kenya
- 2007-present Visiting Scientist, University of Nairobi, Department of Biotechnology and Bioinformatics

Selected Honors and Awards

- 1984-present Honorary Advisor to Committee of Science and Technology, City Gov. Guang Zhou
- 1991 Griff T. Ross Memorial Lecturer, National Institutes of Child Health and Development
- 1994 National Institutes of Health - Honored as First Margaret Pittman Lecturer in recognition of pioneering work on contraceptive vaccine development
- 2001-2002 Fulbright Scholarship to Africa (Kenya)

B. Educational and Institutional Experience

Selected Teaching

- 1982-2002 Lectures to Medical Students, including Immunology, Connective Tissue, all Reproductive Biology subjects and all histology laboratories), Cell Biology and Histology, Baylor College of Medicine
- 1982-2001 Graduate Student Courses at Baylor College of Medicine, including Isolation and Characterization of Proteins, Developmental Biology, Membranes, Reproductive Biology, Carbohydrate structure and function
- 1982-1990 Course director, Seminar course on "Roles of carbohydrates in glycoprotein function"
- 1992-1990 Lectures in Annual Workshop on Molecular Endocrinology and Hormone Action (1982-1990) (Baylor College of Medicine - B.W. O'Malley and W. Schrader, Course Coordinators) (Best Speaker awards, 1987-1990)
- 1990 Seminars and workshop on Two-Dimensional Polyacrylamide Gel Electrophoresis and Immunological Techniques in Course on Protein Chemistry at Cold Spring Harbor, NY
- 1987 Course on Two-Dimensional Polyacrylamide Electrophoresis and Immunological Techniques, Department of Cell Biology, Baylor College of Medicine
- 1987-1990 Workshops on Two Dimensional Polyacrylamide Gel Electrophoresis and Immunological Techniques for Kodak (Rockefeller University); U.T. Texas, Dallas; U.T. Texas, Houston; Massachusetts General Hospital; Fisher Scientific (U. Nebraska).
- 1985 Course on Protein Characterization and Immunological Techniques, WHO, Guangzhou, China

Selected Mentoring

- 1984-1993 Department of Cell Biology: Graduate Student Advisory Committee (Chairman) 1984-1985.

Graduate Education Committee 1986-1995. Baylor College of Medicine: Graduate Education Admissions Committee. 1987-1989; Standing Exam Committee, 1989-1993, 1997-98. Student Advisor to Cell Biology Graduate Student day, 1993.

1993-1995 Baylor College Medicine, Medical School Curriculum Retreat Committee, Extramural Graduate School committee, Cell Biology Graduate Student, Education committee, Adopt a Graduate Student Committee; Graduate, School Curriculum Committee; High School Summer Science Student Committee

- Dr. Dunbar has mentored 7 pre-doctoral students and 20 post-doctoral fellows and visiting scientists.

Selected Advisory Panels

1982-1986 Baylor College of Medicine, Animal Resources Committee: Chairman of subcommittee for Internal Facility Inspection for NIH reports; Subcommittee for Satellite Animal Facility. Committee for Publicity on Animal Research (professional media training by Ogilvy & Mather Public Relations)

1984-1985 Society for the Study of Reproduction - Program Committee.

1983-1987 Society for the Study of Reproduction - Reproductive Cell Biologists (Chairman); Program Committee; Education Committee

1987 NIH Special Study Section on Immunological Contraceptive Development.

1988 NIH Study Section on University-Industry grant (SIBR) project (Chairman).

1988-1990 National Science Foundation Study Panels, Regulatory Biology, Training Grant Program.

1990 Chairman, Committee of LCME Evaluation of Immunology and Microbiology

1991 NIH Site visit team for Technology Development panel.

1991 NIH Study section for Inter-institutional Contraceptive Center Projects

1991 NIH Review Panel Site Visit - Harvard University Population Centers Grant

1993 NIH Study Panel, Molecular Immunology of Sexually Transmitted Diseases

1994-99 NIH Study Section of Reproductive Biology- Regular Member

1997 Advisor to National Institute of Health Contraceptive Development Branch

Selected International Activities

1984-1985 WHO Task Force and Advisory Panel on Reproductive Immunology; WHO Site Visit Team, Family Planning Institute, Guangzhou, China.

1999 NIH Working Group on Global Health Issues

1999-2002 Advisor for NIH Joint working group for US/Indo Program (invited organizer of workshop in New Delhi, 2002 on "Role of Reproductive Tract in Sexually Transmitted Diseases)

1986 Lectures and Laboratory Instruction at Post Graduate Institute, Chandigarh, India

1993 USAID-India Joint Program on Contraception - New Delhi, India

1994 Symposium on Immunocontraception - Australia

1994-1998 WHO Advisory Panel, repeat Site Visits of Institutes in Guangzhou, Chengdu and Beijing, China.

2000-2003 US/India Joint working group on Population Research

C. Selected Relevant Peer-reviewed Publications (from > 100)

D. Wolgemuth, J. Celenza, and B.S. Dunbar (1984) Formation of the rabbit zona pellucida and its relationship to ovarian follicular development. *Devel. Biol.* 106:1-14.

E. Schwoebel, C. Vandervoort, V. Lee, C. Lo and B. Dunbar, (1992). Molecular analysis of the Antigenicity and Immunogenicity of Recombinant ZP Proteins in a non-human primate model. *Biol. Repr.* 47:857-865.

V. Lee, E. Schwoebel, M. Prasad, T. Timmons, R. Cook and B. Dunbar (1993) Isolation and characterization of a cDNA encoding the rabbit 75Kd zona pellucida protein *J. Biol. Chem.* 268(17):12412-12417.

M.H. Shearer, C. Sureau, B. Dunbar and R. C. Kennedy (1998) Structural characterization of viral neutralizing monoclonal antibodies to hepatitis B surface antigen. *Molecular. Immunol.* 35:1149-1160

T. Timmons, S. Skinner and B. Dunbar (2001.). Molecular analysis of a carbohydrate antigen involved in the structure and function of zona pellucida glycoproteins. *Biol Reprod.* Sep;65(3):951-60.

Prasad, S.V. and Dunbar, B.S. (2000) Human Sperm-Oocyte Recognition and Infertility. *Seminars in Reproductive Medicine.* 18(2):141-9.

S.V. Prasad, N. Wang, S. Skinner, Wang, X. Dunbar, B.D., Wolgemuth, D.J., DeMayo, F., and B.S. Dunbar. Expression of human zona pellucida protein (ZP1) in the oocyte and granulosa cells of transgenic mice ovaries. (manuscript in preparation)

Pathogenesis and immune responses in an HIV+ long-term survivor cohort in Kenya. M. Patel, B. Dunbar, S. Meaney, M. Otsyula, and S. T. Patel. (manuscript in preparation).