CURRICULUM VITAE

NAME: *July 2022*

Gwendolyn Vaughn Childs, Ph.D., FAAA

PRESENT POSITION:

Distinguished Professor and Chair,
Department of Neurobiology and Developmental Sciences
University of Arkansas for Medical Sciences
Business TELEPHONE: (501) 686-7020
Business FAX: (501) 686-6382

CAMPUS ADDRESS:

Department of Neurobiology and Developmental Sciences
College of Medicine
University of Arkansas for Medical Science
4301 W. Markham St. Slot 510
Little Rock, AR 72205-7199
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Web page: http://cytochemistry.net/childs/childs.htm

RESEARCHER IDENTIFICATION:

Orcid ID: https://orcid.org/0000-0003-3764-1373
Loop profile 42243
ResearcherID: H-2648-2013

BIOLOGICAL:

U.S. Citizen, former name: Gwen Moriarty
Married: 1992 Gary D. Jones

EDUCATION:

1962 - 1966	B.A. (Biology), Whitman College, Walla Walla, Washington
1968-1972	Ph.D. (Anatomy), University of Iowa, Iowa City, Iowa

PROFESSIONAL ACTIVITIES:

1965	NSF Summer Fellow, Department of Radiation Biology and Biophysics, University of Rochester, Rochester, New York

1966-1968	Research Technician, Electron Microscope Laboratory, Department of Radiation Biology and Biophysics, University of Rochester, Rochester, New York
1967-1968	Graduate Student, Department of Biology, University of Rochester, Rochester, New York
1968-1972	NSF Predoctoral Fellow, Neuroendocrinology Training Program, Department of Anatomy, University of Iowa, Iowa City, Iowa
1971-1972	Visiting Student, Dept Anatomy, University of Nebraska, Omaha, Nebraska
1972-1973	Consultant to Research Service EM Laboratory, Veterans Administration Hospital, Omaha, Nebraska
1972-1973	Consultant to Edgewood Arsenal Research Laboratories, Edgewood Arsenal, Maryland
1972-1974	Course Director, Nurses Anatomy, Univ Nebraska Medical Center, Omaha, Nebraska
1972-1975	Assistant Professor, Department of Anatomy, University of Nebraska Medical Center, Omaha, Nebraska
1974-1977	Principal Investigator, NIH R01 HD08842
1973-1974	Graduate Teaching, Co-Director Adv Physiology (Cell Biology), University of Nebraska, Omaha, Nebraska
1974-1976	Principal Investigator, Basil O'Connor Starter Research Award National Foundation, March of Dimes
1974-1976	Co-course Director - Histology for Medical Students, University of Nebraska Medical Center, Omaha, Nebraska
1974-1976	Principal Investigator, Army Contract, Edgewood Arsenal
1975-1976	Associate Professor, Department of Anatomy, University of Nebraska Medical Center, Omaha, Nebraska
1976	Site Visit Teams, 2 grant centers, NICHD, NIH
1976	Graduate Teaching, Director - Advanced Histology, University of Nebraska, Omaha, Nebraska
1976-1980	Associate Professor of Anatomy and Biological Science, The Medical School, Northwestern University, Chicago, Illinois

1978-1980	Principal Investigator, NIH R01 HD10930 (continued from University of Nebraska, HD08842)
1977-1979	Course Director - Medical Microanatomy, Northwestern University, Chicago, Illinois
1977-1979	Director, Ultrastructural Cytology (60 Undergraduates and Graduate Students), Northwestern University, Chicago, Illinois
1977-1980	Principal Investigator, National Foundation, March of Dimes Basic Sciences Award
1977-1979	Director, Techniques in Electron Microscopy (15 students), Northwestern University, Chicago, Illinois
1979-1984	Research Career Development Award, NIH HD00395
1980-1981	Associate Professor, Department of Anatomy, University of Texas Medical Branch, Galveston, Texas
1980-1996	Teaching of Microanatomy, Department of Anatomy, UTMB
1981-2000	Professor of Anatomy & Neurosciences, University of Texas Medical Branch, Galveston, Texas
1981-1994	Principal Investigator, NIH R01 HD15472 (continued from Northwestern University HD10930; Current award $498,081 total costs for 5 years beginning in 1989.)
1985, 1986	Ad hoc Study Sections, Reproductive Biology, AREA grants NIH
1985-1990	Principal Investigator, NSF DCB 8511627 and DCB 8710211
1986-1991	Principal Investigator, Project #3, Program Project Grant P01 HL37044
1983, 1984	Visiting Professor, The Weizman Institute, Department of Hormone Research, Rehovot, Israel (6 weeks)
1987-1990	Principal Investigator, Navy Contract N00014-88-K-0016
1986-1991	Adjunct Professor, Department of Physiology & Molecular Biophysics, Baylor College of Medicine, Houston, Texas
1988, 1989	Site Visit Teams, 3 Center Grants in Reproductive Biology: Oregon Regional Primate Center; Columbia University; Salk Institute, P04 center grants, NICHD, NIH

1990-1992	Sealy-Smith Foundation Creative New Idea Award
1991-1993	Program Director-Anatomy Graduate Program
1991	Ad Hoc study section to review Special Centers for Infertility; NICHD; August 1991
1991	Site Visit Team: P30 Grant; Tufts University; September
1992-1995	Principal Investigator, NIH R01 DK 39553; "Functional Differentiation of Corticotropes"; $472,501 total
1992-1995	Principal Investigator, NSF DCB9018655; "Epidermal Growth factor modulation of corticotrope function"; $250,000 total award.
1992	Site Visit Team; Center Grant, Baylor College of Medicine; October, 1992
1992	NIH study section- Small Business Grant Awards; October, 1992
1993	Endocrinology study section 1993-1997
1993	Site visit teams Center Grants: Oregon Regional Primate Center; Columbia University, University of Michigan; Univ Calif. San Francisco
1993	Representative of the American Association of Anatomists to the Federation of American Societies for Experimental Biology Journal (FASEB Journal) Editorial Board.
1996-2000	Chair, Membership Committee, The Endocrine Society
1996-2003	Principal Investigator, NIH R01 HD 33915-01 Novel Somatotrope functions during ovulation August 1, 1996-June 30, 2003; PI; $745,955 total award, PI.
1996-2000	Member, Population Research Subcommittee, NICHD, NIH
1996-1999	Member, Health Professions Education Affairs Advisory Committee to the Texas State Coordinating Board.
1996-1999	Council, The Histochemistry Society
1997-2000	Coordinator, Basic Science Core, New Integrated Medical Curriculum, University of Texas Medical Branch
2000-2001	March 25, 2000: **President, U.S. Histochemistry Society**

2000	Winner of the **Distinguished Teacher Award, University of Texas Medical Branch,** Graduate School of Biomedical Science
2000-present	April 1, 2000: Chair, Department of Anatomy, University of Arkansas for Medical Science; Now Department of Neurobiology and Developmental Sciences
2002-2005	Chair, Membership Committee, The Endocrine Society
2003-2008	Director, Medical Microanatomy
2003	Principal Investigator, Project funded by NSF IBN 0240907 Regulation of Leptin expression in the anterior pituitary ($342,599 total costs + $12,750 REU supplement)
2004	Principal Investigator, Project funded by NIH R03 HD 44857 Regulation of Leptin production by gonadotropes ($142,000, total costs)
	Principal Investigator Project funded by NIH R21 HD 047467-01. Cellular Basis for non-parallel gonadotropin release ($250,000 direct costs).
2004	**Innovations in Education Award, College of Medicine, University of Arkansas for Medical Sciences**, 2004 (Co-recipient with Dr. Robert McGehee, for developing large group PBL Sessions that integrated biochemistry and cell biology)
2007	Runner up-Golden Apple Award, given by Freshman Medical Class
2006-2007	Council, Association of Anatomy, Cell Biology and Neurobiology Chairs (AACBNC)
2008-2009	**President-Elect (2008-2009) and President (2009-2010) of Association of Anatomy, Cell Biology and Neurobiology Chairs (AACBNC)**
2009	Principal Investigator, project funded by NIH 1 R01 HD059056-01, The Significance of Leptin Signals to Neonatal Somatotropes and Gonadotropes; 1.785 million; July 2009-June 2015.
2009	Principal Investigator: ARRA Project funded by R03 HD05966 04/01/2009-03/31/2011 Significance of Pituitary Leptin to Gonadotropes $145,000 total costs.
2009	**Outstanding Woman Faculty Award; Woman's Faculty Development Caucus,** UAMS

2009-2011	Gold Sash Award, Given by Graduating Medical Class of, 2009, 2010
2006-2011	Red Sash award (given by each Graduating Medical Class) to faculty who have most influenced them during their medical career
2010-2012	Received NSF large equipment grant as one of 4 Co-Principal Investigators We have purchased state of the art electron microscope and tissue preparation, and microtomy equipment
December 2010	Press release for findings on obese mouse, published in Endocrinology online, November 2010 (see reference 141 and B. Press Releases).
April 2011 to present	**Selected as a Fellow of the American Association of Anatomists, (FAAA)** and honored at their meeting in Washington D.C. (top 10% of the field, selected for contributions to Anatomy and research field); Press release 3/16/2011.
January 2015-2021	Editorial Board—Endocrinology
July 2, 2015-2017	Co-Principal Investigator on new R03 grant NIH HD082793
August 15, 2016-2022	Co- Principal Investigator on new R01 grant NIH R01 1R01HD087057-01-05. Post-transcriptional Pathways that Signal Leptin regulation of Gonadotropes; Contact PI
April 1, 2017-2022	Co-Principal Investigator on new grant NIH 1R01DK113776-01 - 04 Tropic Roles for Leptin in the Maturation of Somatotropes; Contact PI
August 1, 2018-2023	Co-Principal Investigator on new grant NIH 1 R01HD 093461-01-05; Control of pituitary cell plasticity through regulated mRNA translation.
April 7, 2019	Received the **Gomori Award from the Histochemistry Society at Experimental Biology** in Orlando, 2019. This is given every 4 years and is the highest honor conferred by this society.
July 1, 2021	**Promoted to Distinguished Professor**, UAMS
July 1, 2021	Co-Principal Investigator on new grant R01 DK127723-01 (The impact of obesity on somatotrope function. 2021-2026

RESEARCH ACTIVITIES

Area of Research: Neuroendocrinology, Anterior Pituitary cytochemistry and cytophysiology;
General Research: Endocrinology, electron microscopic histochemistry, cell biology and cytophysiology. Regulation of Translation; Post-transcriptional pathways
Specific Projects: Mechanisms of regulation of synthesis, secretion and differential storage of pituitary hormones. Cellular differentiation in the pituitary. Multipotential functions expressed by pituitary cells; Releasing hormone binding and interaction with pituitary cells. Paracrine interactions between pituitary cells mediated by cytokines (leptin) and growth factors (EGF). Effect of stress on the hypothalamic-pituitary axis. Cross talk between nutritional state and pituitary gonadotropes or growth hormone cells. Effects of leptin on pituitary gonadotropes and somatotropes. Post-transcriptional regulatory pathways involving proteins or miRNAs.
Methods and approaches: Cytochemical studies of hormone synthesis with in situ hybridization, binding with biotinylated analogs of releasing hormone, and storage. Purification and differentiation of corticotropes, gonadotropes and somatotropes, Cre-lox knockouts of leptin and leptin receptors selectively in gonadotropes or somatotropes. siRNA knockouts of leptin or leptin receptors in pituitary cells. FACS sorting of purified somatotropes and gonadotropes. RNA-seq, miRNA-seq, single cell RNA-seq.

Grant support:

FUNDED:

1 R01 HD 093461-01-05 Control of pituitary cell plasticity through regulated mRNA translation. Co-PI's A. MacNicol , G.V. Childs, and M. MacNicol. 08/01/2018—07/31/2023; $3,594,792 total costs; received a score of 12 at the 2nd percentile.

1 R01 DK 127723 -01-04 **"**The Impact of Obesity on Somatotrope Function". Co-PIs Childs/MacNicol, A/MacNicol M (25%) 01/01/2021-06/30/2026 $2,311,898 total costs;

No Cost Extension

1R01 HD 087057-01 "Post-transcriptional Pathways that Signal Leptin Regulation of Gonadotropes" Co-PIs Childs/MacNicol (25%) 08/15/2016—3/31/2023 $2,312,370 total costs; Received a score of 14 at the 1.7th percentile.

1 R01 DK 113776-01 "Tropic Roles for Leptin in the Maturation of Somatotropes." Co-PIs Childs/MacNicol/M.MacNicol (25%) NIH/NIDDK 4/1/2017—3/31/23; $1,777,260 total costs Received a score of 24 at the 11th percentile

Pilot Studies Awards (Current)
Development Enhancement Award to obtain R01 "The impact of obesity on somatotrope function". 2020
Sturgis Charitable Trust Award for studies of somatotropes in obese mice. 2020-2021; 2021-2022; 2022-2023
Bridging Award to renew R01 "Tropic Roles for Leptin in the Maturation of Somatotropes. 2020-2022.

PAST (last 15 years):

R03 HD082793-01 "Leptin Molecular Regulatory Mechanisms That Prevent Growth Hormone Deficiency" 07-01-2015—06-30-2018 $149,000 Total costs; Received impact score of 13 at the 1th percentile. Role: Co-PI/PD with Dr. Angus MacNicol.

Development Enhancement Awards for Proposal: Novel leptin signaling pathways that drive somatotrope maturation 4/1/2016-3/31/2017. UAMS Research Council. Role: PI

Center for Translational Neurosciences NIH P30 GM110702 **Pilot Award**: Leptin Signaling Pathways in the Translational Regulation of Neuropeptide Receptor Proteins. 6/1/2015-5/31/2016. Role: PI

Development Enhancement Awards for Proposal: Does Leptin Regulate Gonadotropes By Post-transcriptional Mechanisms? 6/1/2015-5/31/2016. UAMS Research Council. Role: PI

Sturgis Charitable Trust Pilot Award "Interdiction of miRNA-mediated regulation of GHD as a strategy to prevent GHD-associated diabetes" 02/01/2015 – 09/30/2015
Role: Co-PI (with Dr. Angus MacNicol). **The goal of this pilot study is to determine the role of miRNA in regulation of GH in somatotropes.** We will determine if 3 candidate miRNAs are specifically elevated in *Lepr*-null somatotropes and control GH mRNA repression, utilizing the purified somatotropes obtained by fluorescence activated cell sorting (FACS) to enrich this population and by comparing wild-type and *Lepr*-null pituitaries.

NIH R01 HD059056-01 (Role-PI). Signifiance of Leptin Signals to Neonatal Gonadotropes and Somatotropes. July 1, 2009-June 30 2014; $1.7855 million total costs; Received 111 score at the 1.7th percentile. This proposal focuses on the significance of leptin from any source to neonatal maturation of somatotropes and gonadotropes and to their functions in the adult state. It uses transgenic mice that have leptin receptors deleted in somatotropes or gonadotropes.

Sturgis Charitable Trust Pilot Award 01/20/2014 – 09/30/2014 Role: Co-PI (with Dr. Angus MacNicol) "Characterization of miRNA-mediated regulation of GHD as a strategy to prevent GHD-associated diabetes" The goal of this study was to develop transgenic mice that express GFP specifically in somatotropes to facilitate analysis of growth hormone mRNA translational regulation by miRNAs. Dr. MacNicol and I received this award to develop the enriched fluorescent somatotropes for future studies of miRNA regulation.

NIH R03 HD059066-01 (Childs-PI) Significance of Pituitary Leptin to Gonadotropes; May 1, 2009—April 30, 2011. $145,000 total costs (153 score; ARRA funded)

NIH P20 20146-Project IV (Childs-Mentor) Role of leptin in obesity and sleep. 8/1/2009-4/30/2012. $450,000 direct costs; Noor Akhter, Project Director.

NSF Major Research Instrumentation Grant NSF-0959745 ; 'Electron Microscope System for Sample Preparation, Biological Microscopy, Tomography, and Visualization of Protein complexes'; $1.491 million, 12/1/2009-11/30-2011. Co-Principal Investigator with 4 other faculty from Physiology (Storrie and Lubashin), Biochemistry (Raney and Baldini). Equipment to include 200 kV FEI F20 and $404,000 Leica Microsystems tissue processing/cryoultramicrotomy equipment

NSF IBN 0240907 Regulation of Leptin Expression and Function in the Anterior Pituitary April 15, 2003-March 31, 2007; 342,599 Total costs, PI. REU supplements 2003 (12,750); 2004 (12,500) Role-PI

NIH R03 HD 44875: Regulation of Leptin production by gonadotropes: April 2004--March 2007.; $146,000 (funded; received a 2.5th percentile score), Role-PI

NIH R21 HD 047467-01 Cellular basis for Non-Parallel Gonadotropin release. $348,700; 7/1/2004—6/30/2007 (Received a 5.9th percentile score). Role-PI

Past: (last 40 years)

NSF IBN 9724066, Epidermal Growth Modulation of Gonadotrope Function, August 1, 1997-July 31, 2003; PI; $150,000, PI.

NIH R01 HD 33915-01 Novel Somatotrope functions during ovulation August 1, 1996-June 30, 2003; PI; $745,955 total award, PI.

NIH R01 DK44363-01 "Regulation of Corticotrope Excitability". Co-investigator, 10%; Principal Investigator-Dr. Aileen Ritchie; $645,159 total award. 5/1/97--4/30/01.

Sealy Smith Development grant. Novel somatotrope functions during ovulation Feb 1, 1995-Jan 31, 1997; PI; $100,000.

NIH R01 DK44363-01 "Regulation of Corticotrope Excitability". Co-investigator, 10%; Principal Investigator-Dr. Aileen Ritchie; $487,900 total award. 5/1/92--4/30/96.

R01 HD 15472 Continuation of NIH Grant brought from Northwestern University in 1980 (R01 HD 10930). Principal Investigator, 40% "Hormone Storage and Secretion in Gonadotropes," University of Texas Medical Branch (Direct costs: $187,000, 1980-1985; funded supplement $20,000, 1985; $239,000, 12/1/85-11/30/88). Current award is: $498,081 total costs, 12/1/1989--8/31/1996.

NSF DCB 9018655 "EGF Modulation of Corticotrope function", Principal Investigator, 15%; Total award $250,000; 3-15-92--3-31-96.

NIH R01 DK 39553-01 "Functional Differentiation of Corticotropes," Principal Investigator, 25%; Total award: $472,501, 3-1-92--2-28-96.

Merck Contract. Tests of agonists on separated and enriched populations of gonadotropes. $16,404 total award, PI, 12/1/93-open

Merck Contract: Tests of agonist activity on enriched growth hormone cells. $23,500 total award, PI, 9/1/94--open.

NSF DCB-8511627, "Secretory Mechanisms in Pituitary Opiocortin Cells," Principal Investigator, University of Texas Medical Branch ($157,000 10/1/85-3/31/88)

Sealy-Smith Foundation Bridging Grant "Hormone Storage and Secretion in Gonadotropes" Principal Investigator, ($15,000, 4/1/89 - 3/31/90).

Rorer Foundation Contract "Immunohistochemical Studies of Pituitary Tumors", Principal Investigator, ($13,400).

Program Project Grant, P01 HL37044, (Project #3, "Calcium Modulation of CRF Action in the Pituitary") - PI, Program Director - A.M. Brown, M.D., Ph.D., Dept Physiology & Molecular Biophysics, Baylor College of Medicine, Houston, TX $215,960 direct costs for 7/86-6/91).

NSF Grant DCB-8710291, "Modulation of CRH Action," Principal Investigator, Univ. of Texas Medical Branch ($80,000 4/1/88-3/31/90)

US - Israel Binational Foundation grant to support collaborative studies with Dr. Zvi Naor, Department of Biochemistry, University of Tel Aviv, Tel Aviv, Israel. ($38,900/year; 9/01/87-8/31/90) PI = Dr. Naor.

Navy Contract, N00014-88-K-0016, Principal Investigator, "Secretory Mechanisms in Opiocortin Cells During Cold Stress" (10/1/87-9/30/91 $257,415 total costs).

Sealy-Smith Foundation Creative New Idea Award "Modulation of Corticotrope Growth and Function in a New Enriched Pituitary Culture" Principal Investigator, ($60,000, 09/01/90 - 03/01/92).

COMMITTEE RESPONSIBIITIES:

National and International

1980-1999

U.S. Delegate to International Histochemical Society, 1983-1984
Council, U.S. Histochemistry Society, 1982-1985;1996-1999;
President, US Histochemistry Society 2000
Nominations Committee, American Society for Anatomists, 1983
Educational Affairs Committee, American Society for Anatomists, 1984-1987
Organizer of Minisymposium on "Imaging Techniques," Meetings,
American Society for Anatomists, Toronto
Membership Committee--Endocrine Society, 1993-1996, Chair 1996-2000;

Association of American Medical Colleges Professional Development Seminar for Junior Women Faculty, November 29-December 1, 1993; The Eldorado Hotel, Santa Fe, New Mexico. Led a Workshop on "Power in Relationships: Building Networks and Dispelling Gender Stereotypes. Also was on a Panel discussing "Case Histories in Academic Career Building”

Association of American Medical Colleges Professional Development Seminar for Junior Women Faculty, December 5-7, 1993, in Charleston, South Carolina. Led a Workshop similar to the one the previous year. Served on a panel discussing:” Key Skills in Academic Career Building" .

Association of American Medical Colleges Professional Development Seminar for Junior Women Faculty. December, 1994, Santa Fe NM. Led a workshop in parenting and time management.

1999-2010

President, U.S. Histochemical Society, 2000-2001
Strategic Planning Committee for the Endocrine Society 2001
Developmental Committee: The Endocrine Society, 2000-2004
Chair of Membership committee: 2002-2005
Council- Association for Anatomy, Cell Biology and Neurobiology Chairs (AACBNB) 2005-2007.
President Elect: Association for Anatomy, Cell Biology and Neurobiology Chairs (AACBNB) 2008-2009.
President: Association for Anatomy, Cell Biology and Neurobiology Chairs (AACBNB) 2009-2010. Past President 2011-
Basic Science Advisory Committee—Endocrine Society. 2018-present

Grant Review Teams

NIH Study Section, Reproductive Endocrinology, ad hoc member of special review group for AREA Grants, 1985, 1986
Site Visit Teams 1988: PO4 Center Grant, Reproductive Biology, **1989:** Columbia University, Core Center Grant, Reproductive Biology, Oregon Reg. Primate Center; PO4 Center Grant, Reproductive Biology, LaJolla, Calif., **1990:** P30 Center Grant, Reproductive Biology, Kansas City, **1991**:P30 Center Grant, Tufts University **1992**: Baylor College of Medicine **1993**: Northwestern University P01; Oregon Regional Primate Center P30 Grant; Columbia University P50 grant; University of Michigan P30 Grant, Univ. Calif. San Francisco P30 Grant--(all of these are in Reproductive Biology)
Special Study Sections: Centers for Infertility Research; NICHD August, 1991; Small Business Grants-1992, 1993
Endocrinology Study Section: 1993-1995
Population Committee Panel Review for Center grants: November 1995
Study Section: Population Review Committee, Member NICHD NIH, 1996-2000
CHHD-R Reproduction, Andrology and Gynecology Study section NICHD 2014-2018; 2019-2021.

Reviewer service--Past 10 years

Chair of U54 review committee, NICHD Dec 2001; On U54 review committee Nov, 2002
2003-2005:
Ad hoc review study section for U54 Center Grants, NICHD , 2006, 2007, 2008
Reviewer and Site visitor of Cell Biology Graduate Program, University of Cincinnati, November, 2005
Chair of P01 Review committee, 2005, NICHD
PO1 Telephone Conference Review 2008, 2009 NICHD
ICER Study section, 2007
Reviewer for LRP grants 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016,2017

Reviewer for NIA PPG 2008, 2009, 2015, 2016, 2017
Site Visit Reviewer for NICHD Intramural Program March, 2008
Challenge Grant reviewer 2009
Reviewer for Howard Hughes Med into Grad Initiative Training Grants (Med into Grad initiative) July 2009
Ad hoc reviewer on Special Study Section 2009
Reviewer for NICHD U54 grants: 2010, 2012, 2013; P50 Grants—2016; 2018
Ad hoc reviewer on ICER study section 2011, 2012, 2015
Ad hoc reviewer on NIH ENMR Fellowship Committee (2021) and
Ad hoc reviewer on NIH CSME study section 2021.
Ad hoc reviewer for NIA PPG proposals. 2021
Regular reviewer for NICHD LRP proposals: every year.
Ad hoc reviewer for NICHD K99 proposal, NICHD 2022
Reviewer for Chemical Synthesis Facility (Contraceptive Development Program): 2022.

State committees:

Texas Higher Education Coordinating Boards Health Education Advisory Committee.

Representing University of Texas Medical Branch January 1996-1999; Chair of ad hoc committees to review three programs: Radiation Therapy (1996) Ph.D. in Integrative Biology (1997) and A Doctorate in Pharmacy (1998).

University Committees:

University of Texas Medical Branch

Appointments, Promotions and Tenure, 1981-1984
Chairman, 1983-1984
Search Committee for Chairman, Department of Human Biological
Chemistry & Genetics, 1982-1983
Ad hoc Committee for Evaluation of Clinical Research, 1983
Ad hoc Committee for Scholarly Activity, 1984
Master of Medical Science Steering Committee, 1984-1985
Search Committee, Chairman Department of Physiology & Biophysics, 1985
Academic Planning Committee, 1986-1989, Chairman 1988-1989
Ad hoc Committee for Research, 1985-1988
Graduate Curriculum Committee, Graduate School, 1986-1987
Sealy-Smith Foundation Review Board for Grants, 1987-1989
Director, Anatomy Graduate Program, 1991-1993
Director, Cell Biology Graduate Program 1993-
Nominating Committee 1991-1993
Faculty Advisory Council on Research 1991-1994
Search committee, Office of Legal Affairs Director. 1992
Ad hoc review committee for Office of Sponsored Research 1992
M.D. Ph.D. Committee--1994-95
Internal Committee for the Self Study of the Graduate School of Biomedical Sciences 1994
Task Force for the Revision of the Curriculum 1996
Chair of the Modalities of Education Subcommittee 1996
Ex officio member, New Curriculum Committee 1997-
Scientific Integrity Committee

University of Arkansas for Medical Sciences (ad hoc)

Search committee, Dean, College of Medicine
Chairman, Council of Department Chairs
Ad hoc committee to design Medical Cell Biology.
Search committee, Chairs of Surgery, Ob-Gyn, and Internal Medicine
Dean's Distinguished Lecture Committee; Chair 2006-2008
Course Directors committee
Promotions Committee
Chair, Search committee, Chair of Pharmacology and Toxicology
Chair, Search committee, Director of Diversity Recruitment
LCME review subcommittee
Chair, Criteria 4 Committee for NCA review
Co-Chair, Search committee, Pediatrics Chair
Curriculum Steering Committee—Medical curriculum

Selected past committee service (1980 and earlier)

Admissions Committee, Northwestern University, 1977-1980
Curriculum Committee, Northwestern University, 1976-1980
Chairman of Graduate Committee, Northwestern University, Department of Anatomy, 1979-1980

TEACHING RESPONSIBILITIES:

University of Texas Medical Branch

Medical School: Medical Microanatomy, Gross Anatomy/Radiology (facilitator), Endocrinology and Reproduction (facilitator)

Graduate School: Program director, Cell Biology Graduate Program, 1992-1999 Courses taught: Microanatomy, Advanced Microanatomy, Research Techniques, Cell Biology, Neurochemistry, Neuroendocrinology, Graduate Dissertation and research.

University of Arkansas for Medical Sciences

Medical School: Medical Microanatomy, Cell Biology
Course Director, Medical Microanatomy 2003, 2004, 2005, 2006, 2007, 2012-2013
Graduate School: Cell Biology, Neuroendocrinology (2012)

Selected Past Teaching

Microanatomy Course Director--Northwestern University, 1977-1979
Functional Cytology Course Director--Northwestern University 1976-1979
Microanatomy Co-Course Director--University of Nebraska 1975-1976
Cell Physiology Course Co-Director, University of Nebraska 1975

MEMBERSHIP IN SCIENTIFIC SOCIETIES:

American Association of Anatomists
Histochemical Society

American Association for the Advancement of Science
Endocrine Society
Society for the Study of Reproduction
Society for Neuroendocrinology

BOARD CERTIFICATION: NA

LICENSURE INFORMATION: NA

HONORS:

Who's Who in American Colleges and Universities, 1966
Basil O'Connor Starter Research Award to Young Investigators, 1974-1976
Speaker at the 1st Basil O'Connor Symposium in Boston, 1976
Research Career Development Award, 1979-1984
Faculty Marshall for Medical School Graduation (UTMB)-1992, 1993, 1994, 1999
Representative to the FASEB Journal Editorial Board from the American Association of Anatomists (one of two representatives)
Distinguished Teacher Award, Graduate School of Biomedical Sciences, University of Texas Medical Branch, 2000
Innovations in Education Award, College of Medicine, University of Arkansas for Medical Sciences, 2004
Runner up, **Golden Apple Award**, Freshman Class, 2007
Outstanding Woman Faculty, Women's Faculty Development Caucus, UAMS, 2009
Red Sash award, Sr. Class, 2006, 2007, 2008, 2009, 2010, 2011
Gold Sash Award, Sr. Class 2009, 2010, 2011
Fellow of the American Association of Anatomists (FAAA) 2011
Gomori Award, Histochemical Society, at EB, April, 2019
Distinguished Professor, UAMS, July, 2021

Awards to Students and Fellows for Research done in Lab:

Dr. K.N. Westlund, (Postdoctoral Fellow) Vector Laboratories Travel Award Histochemistry Society Meetings, 1983, Charleston, S.C. Abstract #36 in CV.

Dr. Axel Niendorf (Visiting Fellow) Vector Young Investigator Award; Histochemical Society Meetings, 1986, San Francisco, CA. Abstract #48 in CV.

Dr. Jonathan Lloyd, (Ph.D. Student) James E. Beall II Memorial Award in Anatomy and Neurosciences, for Best Ph.D. Dissertation in Neurosciences 1988, University of Texas Medical Branch, Galveston, TX.

Chris Swearingen, (M.D. Summer Student) First Prize for research and poster in an NIH Sponsored Research Program, 1989, University of Texas Medical Branch, Galveston, TX.

Dr. Ping Wu, (Ph.D. Student) Ralph D. Lillie Award for Best Paper Presented by a Graduate Student. International Meeting, US-Japan Histochemical Society, August 1990, Seattle,WA. Abstract #56 in CV.

Dr. Ping Wu, (Ph.D. Student) Travel Award ($500) for Best Poster in Neurosciences Session, Dec. 4, 1990. Galveston Chapter, Neurosciences Society, Abstract #57 in CV.

Dr. Ping Wu (Ph.D. Student) George Sealy award, 1990

Dr. Ping Wu, Ph.D. Dean's award at Graduation. (Note: Dr. Wu has returned to UTMB fter Postdoctoral and Jr faculty positions in Florida and at Harvard. She is now an Associate Professor and highly celebrated for her work on neuronal stem cell transplants.

Dr. James Patterson (Ph.D. student) BEALL Award for Tuition payments. 1992; Two awards for Poster Presentation at the National Student Research Symposium, 1994

Dr. Xuemo Fan: Galveston Neurosciences Chapter Travel Award, 1993, Second place poster

Iris McDuffie, **M.S.**; First place in poster session, Student Career Day, University of Arkansas for Medical Sciences 2002

Mary Iruthayanathan, M.D., Ph.D. First and Second Place in Poster Sessions, Student Research Forum, University of Arkansas for Medical Sciences;

Mary Iruthayanathan, M.D., Ph.D. Travel Award, The Endocrine Society, 2005; She was a first runner up for a distinguished scholar award from the Endocrine Society in 2006 during her first year as a Postdoctoral fellow.

Melody Allensworth-James, Outstanding Poster Award, Presidential Poster Award Obesity Category, June 2012, Endocrine Society meetings

Angela Odle, Ph.D. Top 5 posters in the Neuroendocrine Category, Competed for Presidential Poster Award, June 2012, Endocrine Society meetings.

Angela Odle, Ph.D. Outstanding Poster Award, June, 2013 Endocrine Society meetings; Overall Best Poster Award, Student Research Day, April 10, 2013, UAMS

Angela Odle, Ph.D. Knockout Round Award; received the most votes from the audience and the judges during the meeting of the Endocrine Society, 2018. Won the award for her 3 minute presentation.

Melody Allensworth-James, Ph.D., Outstanding Abstract Award, Endocrine Society meeting, New Orleans, La, 2019.

ADDITIONAL INFORMATION:

Editorial Boards:

American Journal of Anatomy, 1976-1980, 1980-1990
J. Histochemistry - Cytochemistry, 1975-1979; 1979-1983; 1983--2011
Associate Editor 1996-1998
Neuroendocrinology, 1987-1990, 1990-1993
Frontiers in Neuroendocrinology 1989--
Endocrinology 1993--1996; 1996-1999
The FASEB Journal (representative from the American Association of Anatomists)-1993--
Cell Vision 1994-
Receptor 1994-
Scientific Editor: Journal of Endocrinology 1995—1999
Review editor of Frontiers in Systems and Translational Endocrinology 2011-
Editorial Board of ISRN Endocrinology 2010-present
Editorial Board of Endocrinology 2015—2018; 2018-2021; 2022-2025

Associate Editor:

The FASEB Journal 1993-2000
Scientific Editor: Journal of Endocrinology 1995-2004
Associate Editor, J Histochemistry Cytochemistry. 1996-2006

Co-Editor:

Burton L. Baker Memorial Issue American Journal Anatomy, August 1980
with Drs. Karl Knigge and Ludwig Sternberger

Guest Editor:

Special Issue of American Journal of Anatomy on Immunocytochemical Technology, February-March 1986
Special Issue of American Journal of Anatomy on "Advances in Colloidal Gold Technology", July - August 1989

Journal Reviewer:

Cell and Tissue Research
Molecular Endocrinology
Journal of Clinical Endocrinology and Metabolism
Stain Technology
Neuroendocrinology
Peptides
Life Sciences
Brain Research
Journal Biological Chemistry
Diabetes
PNAS
Molecular and Cellular Endocrinology
American Journal of Physiology
The Endocrine Journal

Invited Speaker:

1972-2004

Gordon Research Conference Immunocytochemistry, Beaver Dam, Wisconsin, August 1972
Pituitary Cytochemistry, Tokyo, Japan, August 1975
Gunma Symposium on Endocrinology and Reproduction, Gunma University, Japan, August 1975
Symposium, "Structure and Function of the Gonadotropins," The International Society Biochemical Endocrinology, Bar Harbor, Maine, November 1976
Basil O'Connor Research Symposium, National Foundation March of Dimes, November 1976
Histochemical Society, Symposium on Pituitary Cytochemistry, "Glycoprotein Hormones," April 1973
Histochemical Society Meetings, Symposium on Target Organ Localization of Hormones, 1976
Electron Microscopy Society of America, San Antonio, Texas, Symposia, Workshop on Immunocytochemistry, August 1979
Oklahoma Electron Microscopy Society, conducted two-day Workshop in Immunocytochemistry, Stillwater, Oklahoma, February 1980
American Society for Cell Biologists, Workshop on Immunocytochemistry, Anaheim, California, November 1982
International Meeting of Japanese and American Histochemical Societies, Symposium on Validation in Immunocytochemistry and Workshop on Immunocytochemistry, Vancouver, Canada, July 1982
International Symposium on Immunomorphology, Varna, Bulgaria, September 1983
International Symposium on the "Hormonal Control of the Hypothalamo-pituitary - Gonadal Axis," The Weizmann Institute of Science, Rehovot, Israel, October 1983
International Symposium, "Anterior Pituitary," Jikei University, Tokyo, Japan, November 1984
International Symposium, "Newer Aspects of Pituitary Cell Function," VII International Congress of Endocrinology, Quebec City, July 1-7, 1984
Seminar, The Weizmann Institute, Department of Hormone Research, December 1984
Workshop on Immunocytochemistry, Michigan Electron Microscopy Forum, Ann Arbor, Michigan, May 1985
Workshop on Immunocytochemistry, Iowa Microbeam Society, Iowa City, Iowa, September 1985
Symposium on "Structure and Function of Gonadotropins." to honor Dr. J. G. Pierce, Howard Hughes Institute, Coconut Grove, Florida, February 1986
Reproductive Endocrine Unit Seminar Series, Massachusetts General Hospital, Harvard University, December 5-6, 1986
Workshop on Immunocytochemistry, Upjohn Co., Kalamazoo, Michigan, December 15-16, 1986
Symposium on ACTH to honor Dr. Dorothy Krieger, New York Academy of Sciences, April 6-8, 1987
Symposium on Immunocytochemistry + Workshop, National Meetings, Electron Microscopy Society, August 2-8, 1987
Symposium on Neuroendocrinology of Reproduction, The Netherlands, August 26-29,

Symposium on "The Anterior Pituitary Gland - Fundamental and Pathological Aspects," Conference Inserm, Chateau de Seillac, France, September 20-25,1987

Symposium on Immunogold Techniques sponsored by Janssen's, Inc., Cell Biology Meetings, November 17, 1987, St. Louis. Winter Brain Conference, Steamboat Springs, Colorado. Invited Symposium on "Intermediate Lobe" January 23-29, 1988.

Reproductive Neurobiology Symposium - Galveston Chapter of Neurosciences, May, 1988

Serono Symposium on Gonadotropins, Newport Beach, Calif., March 19-24, 1989

Conference on "Current trends in Immunomicroscopy", Keynote speaker and invited talk about research. George Washington University, Washington, D.C. May 28-31, 1992.

Symposium on "Immunocytochemistry: New Solutions for Old Problems"; Talk on Immunocytochemistry in combination with other techniques". 9th International Congress of Histochemistry and Cytochemistry, The Netherlands, Maastricht. August 30- September 5, 1992

AMWA Professional Development Seminar, Faculty: November 29-December 2, 1992; Sante Fe New Mexico

Texas Society for Electron Microscopy (TSEM) Invited lecture on Current Trends in the non-radioactive detection of mRNA, in situ. March 27, 1993

Conference on Trends in Cell and Molecular Biology, Invited lecture on "An Introduction non-isotopic methods for in situ hybridization for light and electron microscopy." The George Washington Univesity Medical Center, Washington, D.C.

Course on colloidal gold cytochemistry, Lecture on "In situ hybridization", University of Montreal, Montreal, Quebec June 7-11, 1993

Texas Society for Electron Microscopy. Invited Workshop on In Situ Hybridization. October 23, 1993, Galveston, TX.

AMWA Professional Development Seminar Faculty, Charleston, SC. December 5-7, 1993, 1994

Reproductive Sciences Program, Seminar, University of Michigan, May, 1996

International Society for Neuroendocrinologists. Symposium on Growth Factors, September 1997. Marseilles, France; Platform presentation: EGF effects on pituitary corticotropes and gonadotropes.

Penn State University Medical Center, Hershey Pa, Neuroendocrine group; Neuroscience Graduate program. May, 1998, Seminar

5th International Pituitary Congress, Invited to give Oral presentation on Paracrine interactions in Pituitary Cell Function, June 28-30, 1998.

Symposium at the 2000 American Society of Physiology meeting, FASEB, Presentation on EGF regulation of pituitary cells, April 2000.

Symposium on the Pituitary Gland, “Development and function of gonadotropes”. ChristChurch, New Zealand, August, 2001

Presidential Symposium at the US-Japan Joint Histochemistry Society meeting, Seattle, Washington, July, 2002 “Regulation of Synergy in the Pituitary”.

Symposium on the Hypothalamic-Reproductive Axis, International Society for Neuroendocrinology Meeting, Bristol, England, August, 2002. “Neuroendocrine Regulation of Infertility”.

Seminar, University of Oklahoma, Visiting Professor Series, Regulation of synergy in the anterior pituitary. November, 2003

Workshop on Retention and Incentive plans, American Association of Anatomy, Cell Biology, and Neurobiology Chairs, Key West, Fla 2004

Conference on Steroids in the Brain, Invited presentation during "Workshop on Estrogen regulation of growth hormone secretion: March, 2004, Breckenridge, Colo.
ASPET Symposium on Gender and Obesity, FASEB, April, 2004, Invited talk on "Estrogen regulation of leptin expression in the pituitary"

Invited speaker at the International Symposium on Signal Transduction in Health and Disease (STADY IV), held at the University of Tel Aviv, Tel Aviv, Israel. 10/26-10/28, 2005 Talk: PITUITARY LEPTIN: A LINK IN THE NPY-GnRH SIGNALING PATHWAY TO LH RELEASE?

Invited to organize symposium at the 2006 annual meeting of the Society for the Study of Reproduction. Symposium was on Pituitary Plasticity; Session continued in platform talks later that day. August, 2006

Past 10 years

Workshop on Immunocytochemistry, Invited Lecture on history and basic concepts, April 5, 2008, Histochemistry Society Meeting (at Experimental Biology Meetings).

Invited talk at the US Histochemical Society Symposium in Gdansk, Poland (At the International Meetings of all Histochemistry Societies), August 24, 2008

Workshop on Immunocytochemistry, Invited Lecture on history and basic concepts, April 2009, Histochemistry Society Meeting (at Experimental Biology Meetings).

Invitation to speak in a session on "The road to tenure and the road from tenure" at the 2009 meetings of the Association of Anatomy, Cell Biology and Neurobiology Chairs meeting in the Galapagos, January.

Organized symposia on Faculty Development and Mentoring as well as Translational Research at 2010 meetings of the Association of Anatomy, Cell Biology and Neurobiology Chairs meetings in Curacao, January 2010

Invited Lecturer at the Washington Women's Conference, American Association of University Women, Walla Walla Washington, April, 2010: Networking and Team Mentoring

Invited speaker at a Symposium on the Pituitary and Neuroendocrinology at the First meeting of the Conference on Endobolism in Xiamen, China. January, 2011 (also chaired the session)

Invited speaker to give a seminar at the University of Alabama, Nutrition Obesity Research Center, Pituitary Somatotropes as Metabolic Sensors: Selective Loss of Leptin Receptors Causes Obesity" November 22, 2011.

Invited speaker to give a seminar at the Diabetes Research Center, Institute for Diabetes, Obesity and Metabolism, University of Pennsylvania. "Post-transcriptional Regulatory Pathways that Signal Leptin Regulation of Gonadotropes, September, 2015

Participant in Michelson Prize & Grants Co-Development Meeting: Pituitary Gonadotroph Ablation—Development of a Consortium September, 17, 2015

Invited to give a talk at the 98th Annual Meeting of the Endocrine Society's Symposium "New Insights in Gonadotrope Biology": "Leptin Action in Gonadotropes".

Visiting Professor at Mass General Reproductive Endocrine Unit's Seminar Program, Harvard, University; November, 7 2017. Gave lecture in historic "Ether Dome". Title" Gonadotropes as Metabolic Sensors: Production of GnRH Receptors May Serve as a metabolic point for Leptin's Permissive Actions"

Invited Speaker at the Symposium at Experimental Biology: As Gomori Award Recipient, April 8, 2019. Immunocytochemistry: Challenging Paradigms to Illuminate new discoveries in the pituitary. April 8, 2019. Experimental Biology

Invited Speaker at the FASEB conference: The Growth Hormone (GH)/Prolactin (PRL) family in Biology and Disease. Title: Posttranscriptional pathways regulated by leptin in the control of somatotrope function. July 10, 2019

Invited speaker at the 2022 meeting of the American Society for Andrology. Speaking at a symposium on **"The intersection of Metabolism and Male Reproductive Health", Title: Leptin Signaling in Male Reproduction.** May 9, 2022

Invited speaker at the 2022 meeting of the Endocrine Society in the symposium entitled **"Breakthroughs in Understanding Pituitary Networks-Metabolic Profiling of the Pituitary:Leptin Post-transcriptional signaling in Somatotropes and gonadotropes."** June 11, 2022.

PUBLICATIONS:

h-index: 48

We have 174 peer-reviewed publications as of January 2022. Her *h-index*, combining publications under G(C) Moriarty or G(V) Childs is 48, with 6859 citations.

A. ARTICLES IN PEER-REVIEWED JOURNALS: (citations updated January 2022)

1. Moriarty, G.C. and Halmi, N.S. Electron microscopic localization of the adrenocorticotropin producing cell with the use of unlabeled antibody and the peroxidase-antiperoxidase complex. J. Histochem. Cytochem. 20:590-603, 1972. (*Web of Science-199 citations;* Google--*213 citations,)*

2. Moriarty, G.C. and Halmi, N.S. Adrenocorticotropin-production by the intermediate lobe of the rat pituitary. An electron microscopic study. Z. Zellforsch. 132:1-14, 1972. *(112 citations; Google-108)*

3. Moriarty, G.C., Moriarty, C.M. and Sternberger, L.A. Ultrastructural immunocytochemistry with unlabeled antibodies and the peroxidase-anti- peroxidase complex: A technique more sensitive than radioimmunoassay. J. Histochem. Cytochem. 21:825-833, 1973. (*Web of Science: 155 citation; Google—143 Citations*)

4. Moriarty, G.C. Adenohypophysis: Ultrastructural cytochemistry. A review. J. Histochem. Cytochem. 21:855-892, 1973. (*Web of Science: 327 citations*; *Google- 313 Citations)*

5. Petrali, J.P., Hinton, D.H., Moriarty, G.C. and Sternberger, L.A. The unlabeled antibody enzyme method of immunocytochemistry. Quantitative comparison of sensitivities with and without peroxidase-anti-peroxidase complex. J. Histochem. Cytochem. 22:782-801, 1974. (*Google-95 citations; Web of Science-101 citations)*

6. Moriarty, G.C., Halmi, N.S. and Moriarty, C.M. The effect of stress on the cytology and immunocytochemistry of pars intermedia cells in the rat pituitary. Endocrinology 96:1426-1436, 1975. (*Web of science-56 citations; Google-44 Citations*)

7. Moriarty, C.M. and Moriarty, G.C. Bioactive and immunoreactive ACTH in the rat pituitary: Influence of stress and adrenalectomy. Endocrinology 96:1419-1425, 1975. (*Web of Science-70 citations; Google-59*)

8. Moriarty, G.C. Electron microscopic-immunocytochemical studies of rat pituitary gonadotrophs: A sex difference in morphology and cytochemistry of LH cells. Endocrinology 97:1215-1225, 1975. (*Web of Science-91 citations; Google-84 citations*)

9. Moriarty, G.C. Ultrastructural-immunocytochemical studies of gonadotrophs. Gunma Symposium on Endocrinology, Biology of Reproduction and its Hormonal Control. 13:207-219, 1976.

10. Moriarty, G.C. and Tobin, R.B. Ultrastructural Immunocytochemical characterization of the thyrotroph in rat and human pituitaries. J. Histochem. Cytochem. 24:1131-1139, 1976. (*Web of Science-40 citations; Google-42*)

11. Moriarty, G.C. and Tobin, R.B. An immunocytochemical study of TSH storage in rat thyroidectomy cells with and without D or L Rectivying treatment. J. Histochem. Cytochem. 24:1140-1149, 1976. (*Web of Science-37 citations*)

12. Moriarty, G.C. Immunocytochemistry of the pituitary glycoprotein hormones. J. Histochem. Cytochem. 24:846-863, 1976. (*Web of Science-146 citations; Google-144 Citations*)

13. Hutson, J.C., Gardner, P.J. and Moriarty, G.C. Immunocytochemical localization of a follicle stimulating hormone-like molecule in the testis. J. Histochem. Cytochem. 25:163-174, 1977. (*Web of Science-4 citations*)

14. Spaur, R.C. and Moriarty, G.C. Improvements of glycol methacrylate. I. Its use as an embedding medium for electron microscopic studies. J. Histochem Cytochem.25:1637-1674, 1977. *Google-40 citations; Web of science, 38 Citations.*

15. Moriarty, G.C. and Garner, L.L. Immunocytochemical studies of cells in the rat adenohypophysis containing both ACTH and FSH. Nature 265:356-358, 1977. (*Citations-Web of Science-100 citations; Google--93*)

16. Moriarty GC and Garner LL Immunoelectronmicroscopical localization of ACTH/MSH peptides in rat and human pituitaries Frontier of hormone research 4: 26-41 1977. (*Web of Science—12 Citations*)

17. Moriarty, G.C. Heterogeneity of ACTH containing cells in the rat pituitary (with emphasis on the structure and function of the intermediate lobe). Ann. N.Y. Acad. Sci. 297:183-197, 1977. (*Web of Science –17 citations*)

18. Halmi, N.S. and Moriarty, G.C. The cells of origin of ACTH in man. Ann. N.Y. Acad. Sci. 297: 170-182, 1977. (*Web of Science- 16 citations*)

19. Childs, G.V., Hon, C., Russell, L.R. and Gardner, P.J. Subcellular localization of gonadotropins and testosterone in the developing fetal rat testis. J. Histochem. Cytochem. 26:545-564, 1978. (*Web of Science—17 citations*)

20. Childs, G.V., Cole, D., Kubek, M., Tobin, R.B., Wilber, J.F. Endogenous thyrotropin releasing hormone in the anterior pituitary: Sites of activity as identified by immunocytochemical staining. J. Histochem. Cytochem. 26:901-908, 1978. (*Web of Science—48 citations; Google-37*)

21. Childs, G.V. and Ellison, D.G. A Critique of the contributions of immunoperoxidase cytochemistry to our understanding of pituitary cell function. As Illustrated by our Current Studies of Gonadotropes, Corticotropes and Endogenous Pituitary GnRH and TRH. The Histochem. J. 12:405-418, 1980. (*Web of Science—43 citations; Google-42*)

22. Ellison, D.G. and Childs, G.V. An improved method for the rapid collection of serial cells for electron microscopic analysis of their immunocytochemical stain. J. Histochem. Cytochem. 28:279-281, 1980. (*Web of Science—6 citations*)

23. Hutson, J.C., Childs, G.V. and Gardner, P.J. Considerations for establishing the validity of immunocytochemical stains. J. Histochem. Cytochem. 27:1201-1202, 1979. (*Web of Science—10 citations)*

24. Childs, G.V. and Ellison, D.G. An immunocytochemist's view of gonadotropin storage in the adult male rat. Cytochemical and morphological heterogeneity in serially sectioned gonadotropes. Am. J. Anat. 158:397-410, 1980. (*Citations: Web of Science-80, Google-*

25. Childs, G.V., Ellison, D.G., Yang, H.-Y., Kubek, M., Tobin, R.B. and Wilber, J.F. Effects of thyroidectomy, propylthiouracil and thyroxine on pituitary content and immunocytochemical staining of thyrotropin (TSH) and thyrotropin releasing hormone (TRH). J. Histochem. Cytochem. 29:357-363, 1981. (*Web of Science—27 citations*)

26. Bauer, T.W., Moriarty, C.M., and Childs, G.V. Studies of immunoreactive gonadotropin releasing hormone (GnRH) in the rat anterior pituitary. J. Histochem. Cytochem. 29:1171-1178, 1981. (*Web of Science—37 citations*)

27. Childs, G, Ellison, D.G., Foster, L. and Ramaley, J.A. Postnatal maturation of gonadotropes in the male rat pituitary. Endocrinology 109:1683-1693, 1981. (*Web of Science—72 Citations; Google-60*)

28. Naor, Z., Childs, G.V., Leifer, A.J., Clayton, R.N., Amsterdam, A. and Catt, K.J. Gonadotropin releasing hormone binding and activation of enriched population of pituitary gonadotropes. Mol. Cell Endocrin. 25:85-98, 1982. (Web of Science, 28 citations)

29. Dudek, R.W., Childs, G.V. and Boyne, A.F. Quick-freezing and freeze drying in preparation for high quality morphology and immunocytochemistry at the ultrastructural level. J. Histochem. Cytochem. 30:129-138, 1982. (*Web of Science—40 citations*)

30. Wezeman, F.H. and Childs, G.V. Ultrastructural immunohistochemical localization of anti-invasion factor (AIF) in bovine cartilage matrix. J. Histochem. Cytochem. 30:524-531, 1982. (*Web of Science-8 citations*)

31. Childs, G.V., Ellison, D.G. and Ramaley, J.A. Storage of Anterior Lobe Adrenocorticotropin in corticotropes and a sub-population of gonadotropes during the stress non-responsive period in the neonatal male rat. Endocrinology 110:1676-1692, 1982. (*Citations- Web of Science—84 citations; Google-75)*

32. Childs, G.V. and Unabia, G. Application of the avidin-biotin peroxidase complex method to the light microscopic localization of pituitary hormones. J. Histochem. Cytochem. 30:713-716, 1982. (*Citations: Web of Science-101; Google-102*)

33. Childs, G.V., Ellison, D.G., Lorenzen, J.R., Collins, T.J. and Schwartz, N.B. Immunocytochemical studies of gonadotropin storage in developing castration cells. Endocrinology 111:1318-1329, 1982. *(Citations: Web of Science-75; Google-102)*

34. Hyde, C.L., Childs, G, Wahl, L.M., Naor, Z. and Catt, K.J. Preparation of gonadotropin-enriched cell populations from adult rat anterior pituitary cells by centrifugal elutriation. Endocrinology 111:1421-1423, 1982 (*Web of Science--130 citation; Google-106*).

35. Westlund, K.N. and Childs, G.V. Localization of serotonin fibers in the rat adenohypophysis. Endocrinology 111:1761-1763, 1982. *(Citations: Web of Science-104 citations; Google-97*)

36. Childs, G.V. and Unabia, G. Application of a rapid avidin-biotin peroxidase complex (ABC) method to the localization of pituitary hormones at the electron microscopic level. J. Histochem. Cytochem. 30:1320-1324, 1982. (*Web of Science—97 citations*)

37. Naor, Z, Childs, GV; Leifer, AM Gonadotropin releasing hormone binding and activation of enriched populations of pituitary gonadotrophs. Molecular and Cellular Endocrinology 25: #12 1320-1324 1982. (*Web of Science—29 citations*)

38. Childs, G.V. The use of multiple methods to validate immunocytochemical stains. J. Histochem. Cytochem. 31:168-176, 1983. (*Web of Science—34 citations*)

39. Childs, G.V. Neonatal development of the thyrotrope in the male rat pituitary. Endocrinology 112:1647-1652, 1983. (*Web of Science—42 citations; Google-40*)

40. Childs, G.V., Ellison, D.G., Collins, T.J., Lorenzen, J.R. and Schwartz, N.B. Retarded development of castration cells after adrenalectomy or sham adrenalectomy. Endocrinology 113:166-177, 1983. (*Citations—Web of Science---26 citations; Google-24*)

41. Childs, G.V., Hyde, C. and Naor, Z. Morphometric analysis of thyrotropes in developing and cycling female rats: Studies of intact pituitaries and cell fractions separated by centrifugal elutriation. Endocrinology 113:1601-1607, 1983. (*Web of Science—20 citations*)

42. Childs, G.V., Hyde, C., Naor, Z. and Catt, K. Heterogeneous LH and FSH storage patterns in subtypes of gonadotropes separated by centrifugal elutriation. Endocrinology 113:2120-2128, 1983. Note: This paper has been reprinted twice in the "Survey of Obstetrics and Gynecology" with a review by the editors discussing the significance of the work (see issues published in October, 1984 and January, 1985). (*Web of Science—74 citations; Google-68*)

43. Childs, G.V., Naor, Z., Hazum, E., Tibolt, R., Westlund, K.M. and Hancock, M.B. Localization of biotinylated gonadotropin releasing hormone on pituitary monolayer cells with avidin-biotin peroxidase complexes. J. Histochem. Cytochem. 31:1422-1425, 1983. (*Web of Science—50 citations; Google-60*)

44. Childs, G.V., Naor, Z., Hazum, E., Tibolt, R., Westlund, K.N. and Hancock, M.B. Cytochemical characterization of pituitary target cells for biotinylated gonadotropin releasing hormone. Peptides 4(4):549-555, 1983. (*Web of Science—50 citations; Google-49*)

45. Westlund, K.N., Chmielowiec, S. and Childs, G.V. Somatostatin fibers and their relationship to specific cell types (GH and TSH) in the rat anterior pituitary. Peptides 4(4):557-562, 1983. (*Web of Science—24 citations*)

46. Childs, G.V. Application of dual pre-embedding stains for gonadotropins to pituitary cell monolayers with avidin-biotin (ABC) and peroxidase-anti-peroxidase (PAP) complexes: Light microscopic studies. Stain Technology 58:281-289, 1983. (*Web of Science—24 citations*)

47. Tung, K.S.K., Ellis, E., Childs, G.V. and Dufau, M. The dark mink: A model of male infertility. Endocrinology 114:922-929, 1983. *(Web of Science—29 citations*)

48. Westlund, K.N., Wynn, P.J., Chmielowiec, S., Collins, T.J. and Childs, G.V. Characterization of a potent biotin-conjugated CRF analog and the response of anterior pituitary corticotropes. Peptides 5:627-634, 1984. (*Web of Science—42 citations; Google-41*)

49. Westlund, K.N., Aguilera, G. and Childs, G.V. Quantification of morphological changes in pituitary corticotropes produced by in vivo CRF stimulation and adrenalectomy. Endocrinology 116:439-445, 1985. (*Web of Science—78 citations; Google-68*)

50. Childs, G.V. Shifts in gonadotropin storage in cultured gonadotropes following GnRH stimulation in vitro. Peptides 6:103-107, 1985. (*Web of Science—39 Citations*)

51. Tibolt, R.E. and Childs, G.V. Cytochemical and cytophysiological studies of GnRH target cells in the male rat pituitary: Differential effects of androgens and corticosterone on GnRH binding and gonadotropin release. Endocrinology 117(1):396-404, 1985. (*Web of Science—44 Citations; Google-33*)

52. Childs, G.V., Unabia, G. and Tibolt, R. How the fixation-embedding protocol affects the specificity and efficiency of immunocytochemical stains for gonadotropin subunits. Am. J. Anat. 174:409-417, 1986. (*Web of Science—12 Citations*)

53. Naor, Z. and Childs, G.V. Binding and Activation of gonadotropin releasing hormone receptors in pituitary and gonadal cells. Int'l Rev. Cytology 103:147-187, 1986. (*Web of Science—29 Citations*)

54. Niendorf, A., Dietel, M., Arps, H., Lloyd, J. and Childs, G.V. Visualization of binding sites for parathyroid hormone (1-84) on cultured kidney cells with Biotinyl-b-PTH (1-84). J. Histochem. Cytochem. 34:357-361, 1986. (*Web of Science—17 citations*)

55. Childs, G.V., Ellison, D.G. and Unabia, G. Immunocytochemical studies of pituitary hormones with PAP, ABC, and immunogold techniques: Evolution of technology to best fit the antigen. Am. J. Anat. 175:307-330, 1986. (*Web of Science—30 Citations*)

56. Ibrahim, S.N., Moussa, S.M. and Childs, G.V. Morphometric studies of rat anterior pituitary cells after gonadectomy: Correlation of changes in gonadotropes with serum levels of gonadotropins. Endocrinology 119:629-637, 1986. (*Web of Science 105 citations; Google-90 Citations)*

57. Wynn, P.C., Suarez-Quian, C.A., Childs, G.V. and Catt. K.J. Pituitary binding and internalization of GnRH agonist and antagonist analogues in vivo and in vitro. Endocrinology 119:1852-1863, 1986. (*Web of Science—28 citations*)

58. Childs, G.V., Hazum, E., Amsterdam, A., Limor, R. and Naor, Z. Cytochemical evidence for different routes of GnRH processing by large gonadotropes and granulosa cells. Endocrinology 119:1329-1338, 1986. (*Web of Science—24 citations*)

59. Childs, G.V, Morell, JL, Niendorf, A and Aguilera, G. Cytochemical studies of CRF receptors in anterior lobe corticotropes: Binding, glucocorticoid regulation and endocytosis of [Biotinyl-Ser^{1}] CRF. Endocrinology 119:2129-2142, 1986. (*Web of Science-122 citations; Google-90*)

60. Limor, R., Ayalon, D., Capponi, A., Childs, G.V. and Naor, Z. Cytosolic free calcium levels in cultured pituitary cells separated by centrifugal elutriation: Effect of gonadotropin-

releasing hormone. Endocrinology 120:497-503, 1987. (*Web of Science—79 citation; Google-62*)

61. Childs, G.V. and Burke, J. Use of the reverse hemolytic plaque assay to study the regulation of anterior lobe ACTH secretion by CRF, AVP, A-II and glucocorticoids. Endocrinology 120:439-444, 1987. (*Web of Science—50 citations; Google-40*)

62. Childs, G.V., Unabia, G., Burke, J.A. and Marchetti, C. Secretion from corticotropes after avidin-fluorescein stains for biotinylated ligands (CRF or AVP). Am. J. Physiol. 252:(Endocrinol Metab. 15): E347-E356, 1987. (*Web of Science—28 citations*)

63. Marchetti, C., Childs, G.V. and Brown, A.M. Membrane currents of identified isolated rat corticotropes and gonadotropes. Am. J. Physiol. 252:(Endocrinol. Metab. 15):E340-346, 1987. (*Web of Science—87 citations; Google-60*)

64. Childs, G.V., Marchetti, C. and Brown, A.M. Involvement of sodium channels and two types of calcium channels in the regulation of ACTH release. Endocrinology, 120:2059-2069, #5, 1987. (*Web of Science—67 citations, Google-55*)

65. May, V., Wilber, J.F., U'Prichard, D.C. and Childs, G.V. Persistence of immunoreactive TRH and GnRH in long-term primary anterior pituitary culture. Peptides, 8:543-558, 1987. (*Web of Science—64 Citations; Google-62*)

66. Childs, G.V. Cytochemical studies of the regulation of ACTH secretion. Ann.. N.Y. Acad. Sci. 512:248-276, 1987. (*Web of Science—26 citations*)

67. Childs, G.V., Unabia, G., Tibolt, R. and Lloyd, J.M. Cytological factors that support non-parallel secretion of LH and FSH during the estrous cycle. Endocrinology 121:1801-1813, 1987.*(Web of Science—71 Citations; Google-65*)

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B. Press Releases and Editorial Reviews:

3/17/2009:
Gwen Childs named Outstanding Woman Faculty
http://www.uamshealth.com/?id=4583&sid=1

12/2/2010:
Regarding discovery published in Endocrinology (see reference 141). **UAMS Press Release**: UAMS Researcher Finds Genetic Link to Obesity

KARN and KUAR radio stations have aired taped interviews with Dr. Childs.
CBS, Channel 11 news (local): Interview and online article, Video
KARK NBC news broadcast: Genetic Link to Obesity Found by UAMS Researcher
ABC local news: Study Finds Possible Link To Obesity
Fox news: Obesity Hormone
MDLinX editorial commentary: The Somatotrope as a Metabolic Sensor: Deletion of

Leptin Receptors Causes Obesity

12/10/2010: Endocrine News article describing the paper
http://www.endo-society.org/endo_news/2010/upload/Endocrine-News-December-2010.pdf

3/16/2011: UAMS Researcher named Prestigious AAA Fellow

April, 2013. The article by Syed et al (#145) was reviewed in Note: This paper was reviewed in an Editorial in the April, 2013 Issue of Endocrinology: Ellsworth, BS 2013 Obesity, A Somatotrope Perspective, Apr;154(4):1390-1. doi: 10.1210/en.2013-1159.
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April, 2019: Press release issued by UAMS regarding Dr. Childs' receipt of the Gomori Award.
https://news.uams.edu/2019/04/30/gwen-childs-ph-d-earns-highest-award-in-histochemistry/?_ga=2.262594060.1032842514.1556551749-1971810858.1470146570

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C. Dissertation:

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D. Web pages:

1. World Wide Web Home pages for the Cell Biology Graduate Program, including Pages for Neuroendocrinology research groups. August, 1995. Address: http://cellbio.utmb.edu/

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E. Books or Symposium Chapters (edited):

1. Childs, G.V., Editor, IMMUNOCYTOCHEMICAL TECHNOLOGY. Alan R. Liss, New York, 1986.

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2. Moriarty, G.C. and Garner, L.L. Subcellular localization of ACTH, □MSH and ACTH fragments in rat and human pituitaries. In: FRONTIERS OF HORMONE RESEARCH IN NEUROSCIENCE, Vol. 4, Symposium on MSH, S. Karger, Amsterdam, pp. 26-41, 1977.

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4. Childs, G.V. and Cole, D.E. Contributions of immunoperoxidase cytochemistry to our understanding of pituitary cell function. 37th Annual Proceedings of Electron Microscopic Society of America, G. W. Bailey (ed.). San Antonio, Texas, pp. 108-111, 1979.

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G. Abstracts:

The abstracts are not included in this version.