#### **CURRICULUM VITAE**

# Marilyn E. Thompson, Ph.D. Professor

# Department of Pharmaceutical, Social, and Administrative Sciences Belmont University College of Pharmacy and Health Sciences

**FULL NAME:** Marilyn Eileen Thompson Odom

**BUSINESS ADDRESS AND** 

**CONTACT INFORMATION:** Department of Pharmaceutical, Social, and

Administrative Sciences

College of Pharmacy and Health Sciences

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Nashville, Tennessee 37212 Telephone (615) 460-8121

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**EDUCATION** 

Ph.D. Basic Medical Sciences, June, 1994

Specialty in Pharmacology University of South Alabama

Mobile, Alabama

B.S. Respiratory Therapy, June, 1986

(magna cum laude) University of South Alabama

Mobile, Alabama

OTHER ACADEMIC TRAINING

1994-1999 Postdoctoral training

Mentor, Jeffrey T. Holt, M.D.

Vanderbilt University School of Medicine

Department of Cell Biology

Nashville, Tennessee

POSITIONS AND EMPLOYMENT

2023-present Professor of Pharmacology

Department of Pharmaceutical, Social, and

Administrative Sciences

College of Pharmacy and Health Sciences

Belmont University Nashville, Tennessee

Adjunct Professor School of Graduate Studies and Research Meharry Medical College Nashville, Tennessee
Chair Department of Integrated Medical Education Thomas F. Frist, Jr. College of Medicine Belmont University Nashville, Tennessee
Chair Department of Pharmaceutical, Social, and Administrative Sciences Belmont University College of Pharmacy Nashville, Tennessee
Professor Department of Pharmaceutical, Social, and Administrative Sciences Belmont University College of Pharmacy Nashville, Tennessee
Adjunct Associate Professor School of Graduate Studies and Research Meharry Medical College Nashville, Tennessee
Associate Professor Department of Pharmaceutical, Social, and Administrative Sciences Belmont University College of Pharmacy Nashville, Tennessee
Director of Graduate Studies Cancer Biology Graduate Program Meharry Medical College Nashville, Tennessee
Associate Professor Department of Cancer Biology Meharry Medical College Nashville, Tennessee

2000-2008 Associate Member

Vanderbilt-Ingram Cancer Center

Nashville, Tennessee

1999-2007 Assistant Professor

Department of Biochemistry (Cancer Biology)

Meharry Medical College Nashville, Tennessee

1986-1987 Respiratory therapist

Mobile Infirmary Medical Center

Mobile, Alabama

1984-1986 Student respiratory therapist

University of South Alabama Medical Center

Mobile, Alabama

PROFESSIONAL MEMBERSHIPS

2022-present International Association of Medical Science

Educators (IAMSE)

2018-present American Society for Pharmacology and

Experimental Therapeutics (ASPET)

2009-2022 American Association of Colleges of Pharmacy

(AACP)

2005-2007 American Society of Biochemistry and Molecular

Biology

2001-2008 American Association for Cancer Research

(AACR)

1999-present American Association for the Advancement of

Science (AAAS)

1994-2007 Sigma Xi

# PROFESSIONAL AND SERVICE ACTIVITIES

<u>Institutional service</u> <u>Belmont University</u>

2019-2020 Member, Pharmacy Practice (Ambulatory Care) Faculty

Search Committee, College of

Pharmacy

2018-2019 Member, Pharmacy Practice (Ambulatory Care) Faculty

Search Committee, College of Pharmacy

2016-present Academic and Professional Standards Committee, College

of Pharmacy

2015-2016 Member, Tenure, Promotions, and Leave Committee,

College of Pharmacy

2015-2018 Member, Assessment Committee, College of Pharmacy

2013-2015 2012-2015 2012-present 2011-2015 2011 2010 2009-2010 2009-2011	New Faculty Mentor, Teaching Center Teaching Center Advisory Board Faculty Advisor, Minority Health Sciences Association Chair, Admissions Committee, College of Pharmacy Chair, Pharmaceutical Sciences Faculty Search Committee (two positions) Chair, Social Sciences Faculty Search Committee for Department of Pharmaceutical Sciences Co-advisor, Christian Pharmacists Fellowship International Member, Admissions Committee, College of Pharmacy Member, Speaker Series Task Force, Belmont University College of Health Sciences Member, Religion and Ethics Committee, Belmont University
Meharry Medical College	
2007-2008	Coordinator, Cancer Biology Journal Club
2006-2008 2006-2008	Member, RISE Internal Advisory Committee Member, U54 Basic Science Faculty Search Committee
2006-2008	Member, MMC/VU U54 Cancer Training Program
2004-2008	Chair, Admissions Committee of the School of Graduate
2004-2000	Studies and Research
2001	Task Force on Performance Based Incentive Program
2001-2003	Departmental Representative, Admissions Committee of
	the School of Graduate Studies and Research
2001-2002	Diversity Subcommittee of the MMC/Vanderbilt Alliance
2000-2005	Interviewer, Medical School Admissions
1999-2008	Biochemistry (Cancer Biology) Appointments, Promotions,
1000 2000	and Tenure Committee
1999-2008	Biochemistry (Cancer Biology) Graduate Training
1999-2008	Committee  Piochamistry Teaching Committee
1999-2008	Biochemistry Teaching Committee
Graduate training activities at Meha	arry Medical College
2008	Course co-director, Cancer Biology 1, Cancer Biology
	Program
2008	Course director, Biomedical Sciences II, School of
	Graduate Studies and Research
2007-2008	Chair, Curriculum Design Committee, School of Graduate
	Studies and Research
2007-2008	Director of Graduate Studies, Cancer Biology Program
2007	Co-facilitator, Workshop on Preparing F31 Predoctoral
	Fellowship Applications

National service	
2022	Reviewer, abstracts for annual International Association of Medical Science Educators meeting
2017-2020	Chair, Research Committee, Biological Sciences Section, American Association of Colleges of Pharmacy (AACP)
2017-2019	Secretary, Biological Sciences Section, American Association of Colleges of Pharmacy (AACP)
2013-2019	Reviewer, abstract for annual meeting of American Association of Colleges of Pharmacy (AACP)
2004	External Chair, Dissertation Defense Committee for Nicole Johnson, Department of Pathology, University of South Florida
2003-2004	Chair, Minority Scholar Awards in Cancer Research Selection Committee, American Association of Cancer Research (AACR)
2001-2004	AACR Minorities in Cancer Research Council
2001-2003	Chair, HBCU Faculty Scholar in Cancer Research Selection Committee, AACR
<u>Local service</u>	
2020	External Reviewer, Promotion Portfolio, Joe Deweese Ph.D. Lipscomb University College of Pharmacy
2016-2019	Judge, Student Research Day Poster Presentations, Meharry Medical College
2009-2019	Judge, Student Presentations, Research Symposium, Tennessee State University
2009	Judge, Student Research Day Poster Presentations, Meharry Medical College
2008	Judge, Student Oral Presentations, Student Research Day, Tennessee State University
Journal review service	
2023	Ad hoc reviewer, Medical Science Educator
2021	Ad hoc reviewer, Journal of Medical Education and
	Curricular Development
2018, 2019	Ad hoc reviewer, Journal of Cellular Biochemistry
2015	Ad hoc reviewer, Medical Archives Research
2012, 2013	Ad hoc reviewer, Journal of Cellular Biochemistry
2012	Ad hoc reviewer, Patient Preference and Adherence
2008	Ad hoc reviewer, Molecular Cancer Research, Cellular
	and Molecular Biology Letters, Breast Cancer
2007	Research and Treatment, Cancer Research
2006	Ad hoc reviewer, Experimental Cell Research
2002	Ad hoc reviewer, Molecular and Cellular Biology

## Textbook review service

2014 Reviewer, <u>Anatomy & Physiology for Health Professionals</u>,

2<sup>nd</sup> edition, Jones and Bartlett

Gran	<u>t/Fello</u>	wship	review	panels	3
2011	2012	2014	2020		

2011-2012, 2014-2020	Reviewer, AACP New Investigator Awards
2011	Designation AACD Ct. dest I ad Community Engage

2011 Reviewer, AACP Student-Led Community Engagement Awards

2009 Reviewer, National Institutes of Health Study Section

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2008-2010 Scientist Reviewer, Breast Cancer Research Program,

**CDMRP** 

2007 Reviewer, California Breast Cancer Research Program 2007-2008 Reviewer, National Institutes of Health Study Sections

Diversity Predoctoral Fellowship applications

2003-2004 Reviewer, National Institutes of Health Study Section

ZRG1 NBC-1-29L

# **HONORS AND AWARDS**

2021	Teaching Center Travel Award, Belmont University
2014	Most Influential Faculty Member, Belmont University
	College of Pharmacy
2011, 2012	Teaching Center Travel Award, Belmont University
2008	Distinguished Faculty in Research Training, School of
	Graduate Studies and Research, Meharry Medical College
2008	Recipient, AACR Minority-Serving Institution Faculty
	Scholar in Cancer Research Award to attend AACR
	Conference on the Science of Health Disparities
2006	Travel award to attend FASEB Grantsmanship Training
	Program
2005	Recognition of service to Children's Church Ministry
	Greater Pleasant View Baptist Church
1986	Magna cum laude-University of South Alabama

## **PATENTS**

<u>U. S. Patent No. 5,891,857:</u> Characterized BRCA1 and BRCA2 Proteins and screening and therapeutic methods based on characterized BRCA1 and BRCA2 proteins (JT Holt, DL Page, RA Jensen, ME Thompson, C Robinson-Benion, MC King, CI Szabo; co-inventors). U. S. Patent Issued April 6, 1999. Patent covers retroviral BRCA1 gene therapy of ovarian cancer.

<u>U. S. Patent No. 6,149,903:</u> Characterized BRCA1 and BRCA2 Proteins etc. (JT Holt, DL Page, RA Jensen, ME Thompson, C Robinson-Benion, MC King and CI Szabo; co-inventors). U.S. Patent Issued April 6, 1999. Patent covers adenoviral and DNA gene therapy of ovarian cancer.

#### RESEARCH GRANTS AND FELLOWSHIPS RECEIVED

2003-2006	NIH/NCI U54 Cancer Research Partnership Pilot Project
2000-2005	NIH/NCI Career Development Award
1999-2001	NIH/RCMI (laboratory start-up funds)
1995-1997	National Science Foundation Postdoctoral Minority Fellowship
1991	Ford Foundation Dissertation Fellowship (declined)
1991-1993	Pharmaceutical Manufacturers' Association Fellowship
1988	Ford Foundation Fellowship (declined)
1988-1991	National Science Foundation Graduate Minority Fellowship

## GRADUATE STUDENT DISSERTATIONS

Glover-Collins, KL. Nuclear Export of BRCA1 Occurs During Early S Phase and is Calcium Dependent. Meharry Medical College, January, 2008.

Fitzgerald, LD. Regulation of BRCA1 Localization by Hypoxic Sress and Tumor Necrosis Related Apoptosis Inducing Ligand in Mammary Epithelial Cells. Meharry Medical College, April, 2006.

Hinton, CV. Signaling Through the Phosphatidylinositol 3-Kinase/Akt Pathway Regulates the Nuclear Localization of BRCA1. Meharry Medical College, March 2005.

#### UNDERGRADUATE STUDENT THESIS

Indukuri, H. Investigating the Efficacy of Tazematostat for in vitro Treatment of Human Triple Negative Breast Cancer Cells. Belmont University, April, 2022. Advisor: Marilyn Odom (Thompson)

Lawrence, E. Selinexor Hyperactivates Akt and Induces Its Nuclear Accumulation. Honors Thesis in fulfillment of requirements for graduation. Belmont University, April, 2020. Advisor: Marilyn Odom (Thompson)

## **INVITED PRESENTATIONS**

"Regulation of BRCA1 by the PI-3K/Akt Pathway" 2007 Meharry Medical College-Vanderbilt Ingram Cancer Center Annual Retreat, November 2007.

"The Response of BRCA1 to TRAIL Signaling" 2006 Spring Retreat of the Vanderbilt-Ingram Cancer Center. May 5, 2006.

"Characterization of the Nuclear Import and Export of BRCA1" Ninth Research Centers in Minority Institutions (RCMI) International Symposium on Health Disparities: Frontiers in Biomedical Sciences: Current Innovations and Future Trends. December 8-11, 2004.

"The Ins and Outs of BRCA1" Department of Pathology, University of South Florida. July, 2004.

"Understanding the Nuclear-Cytoplasmic Shuttling of BRCA1" Meharry Medical College-Vanderbilt-Ingram Cancer Center Annual Retreat, November, 2002.

"Characterization of BRCA1 Nuclear Export", Vanderbilt-Ingram Cancer Center Breast Cancer Research Program, June 11, 2002.

## **EDUCATIONAL PRESENTATION**

"Assessment of student learning and level of empathy through use of creative expression" Roundtable Session. AACP Annual Meeting, July 2013.

#### **PUBLICATIONS**

# Peer-reviewed Publication in Scholarship of Teaching and Learning

Clauson A., L. Hahn, T. Frame, A. Hagan, L.A. Bynum, <u>M.E. Thompson</u>, K. Kiningham. An innovative escape room activity to assess student readiness for advanced pharmacy practice experiences (APPEs). Currents in Pharmacy Teaching and Learning 11 (7): 723-728, 2019.

<u>Thompson, M.E.</u>, K. Reed, K. Shultes, and C. Ficzere. Student perceptions of a basic medical science-focused advanced pharmacy practice experience. Medical Research Archives 2:1-14, 2015.

<u>Thompson, M.E.</u>, R. Ford, and A. Webster. Effectiveness of interactive, on-line games in learning neuroscience and student's perception of the games as learning tools: a pre-experimental study. J. Allied Health 40: 150-155, 2011.

## Peer-reviewed Publications in Research

<u>Thompson, M.E.</u> BRCA1 16 years later: nuclear import and export processes. FEBS J. 277: 3072-3078, 2010

Thompson, M.E. BRCA1 16 years later: an overview. FEBS J. 277: 3071, 2010

Glover-Collins, K. and M.E. Thompson. Nuclear export of BRCA1 occurs during early S phase and is calcium-dependent. Cell. Signalling 20: 958-968, 2008.

Fitzgerald, L.F., C.K. Bailey, S.J. Brandt, and M.E. Thompson. BRCA1 accumulates in the nucleus and enhances apoptosis in response to TRAIL. FEBS J. 274: 5137-5146, 2007.

Hinton, C.V., L.F. Fitzgerald, and <u>M.E. Thompson</u>. Phosphatidylinositol 3-kinase/Akt signaling enhances nuclear localization and transcriptional activity of BRCA1. Exp. Cell Res. 313: 1735-1744, 2007.

<u>Thompson, M.E.</u>, C. Robinson-Benion, and J.T. Holt. An amino-terminal motif functions as a second nuclear export sequence in BRCA1. J. Biol. Chem. 280: 21854-21857, 2005.

Abbott, D.E., M.E. Thompson, C. Robinson-Benion, G. Tomlinson, R.A. Jensen and J.T. Holt. BRCA1 expression restores radiation resistance in BRCA1-defective cancer cells through enhancement of transcription-coupled DNA repair. J. Biol. Chem. 274:18808-18812, 1999.

- Holt, J.T., <u>M.E. Thompson</u>, C. Szabo, C. Robinson-Benion, C.L. Arteaga, M.-C. King and R.A. Jensen. Growth retardation and tumor inhibition by BRCA1. (Correction) Nature Genetics 19:102, 1998.
- Jensen, R.A., M.E. Thompson, T.L. Jetton, R. van der Meer, B. Helou, C.L. Arteaga, D. L. Page, J.T. Holt, S.R. Tronick, A.M. Gown, M. Skelly, B. Ostermeyer, D. Schieltz, C. I. Szabo and M.-C. King. BRCA1 protein products (in reply). Nature Genetics 13:269-272, 1996.
- Jensen, R.A., M.E. Thompson, T.L. Jetton, C.I. Szabo, R. van der Meer, B. Helou, S.R. Tronick, D.L. Page, M.-C. King and J.T. Holt. BRCA1 is secreted and exhibits properties of a granin. Nature Genetics 12:303-308, 1996.
- Holt, J.T., M.E. Thompson, C. Szabo, C. Robinson-Benion, C.L. Arteago, M.-C. King and R. A. Jensen. Growth retardation and tumour inhibition by BRCA1. Nature Genetics 12:298-302, 1996.
- <u>Thompson, M.E.</u>, R.A. Jensen, P.S. Obermiller, D. L. Page and J.T. Holt. Decreased expression of BRCA1 accelerates growth and is often present during sporadic breast cancer progression. Nature Genetics 9:444-450, 1995.
- <u>Thompson, M.E.</u>, D.L. Valentine, S.J. Strada, J.A. Wagner and J.G. Scammell. Transcriptional regulation of secretogranin II and chromogranin B by cyclic AMP in a rat pheochromocytoma cell line. Mol. Pharmacol. 46:880-889, 1994.
- Thompson, M.E., W.E. Zimmer, A.L. Haynes, D.L. Valentine, S. Forss-Petter and J.G. Scammell. Prolactin granulogenesis is associated with increased secretogranin expression and aggregation in the Golgi apparatus of GH<sub>4</sub>C<sub>1</sub> cells. Endocrinology 131:318-326, 1992.
- <u>Thompson, M.E.</u>, W.E. Zimmer, L.B. Wear, L.A. MacMillan, W.J. Thompson, W.B. Huttner, H.H. Hidaka and J.G. Scammell. Differential regulation of chromogranin B/secretogranin I and secretogranin II by forskolin in PC12 cells. Mol. Brain Res. 12:195-202, 1992.
- Scammell, J.G., R.von Haven, H.G. Friesen, L.B. Wear, <u>M.E. Thompson</u>, A.G. Brady, L.E. Williams and C.R. Abee. Characterization of prolactin and growth hormone immuno- and bioactivities in the pituitary gland and serum of the squirrel monkey (Saimiri boliviensis boliviensis). Am. J. Primatol. 26:35-46, 1992.
- Scammell, J.G., M.G. Scott, K.K. Outlaw, <u>M.E. Thompson</u>, S.J. O and R. B. Belen. Characterization of monoclonal antibodies against ovine prolactin: Suitability for use in immunocytochemical analysis of rat prolactin. J. Histochem. Cytochem. 38:117-122, 1990.
- <u>Thompson, M.E.</u>, L.A. MacMillan, C.L. Bethea, L.E. Williams, C.R. Abee and J.G. Scammell. Determination of lactogenic activity in the serum of the squirrel monkey (Saimiri boliviensis) by the Nb2 lymphoma bioassay. Am. J. Primatol. 19:175-181, 1989.
- Lincoln, T.M., M.E. Thompson and T.L. Cornwell. Purification and characterization of two

forms of cyclic GMP-dependent protein kinase from bovine aorta. J. Biol. Chem. 263:17632-17637, 1988.

# Abstracts and Presentations in Scholarship of Teaching and Learning

<u>Thompson, ME</u> and K.Wahaib. Utilizing Case-Based Learning to Connect Science and Practice. Annual Meeting of the American Association of Colleges of Pharmacy, 2018.

#### Abstracts and Presentations in Research

Dotolo, N., T. Chen, E.D. Bradley, and <u>M.E. Thompson</u>. Selinexor induces apoptosis in triplenegative breast cancer: an *in vitro* study. American Society of Health-System Pharmacy (ASHP) Midyear Meeting, December, 2020.

Linden, L., A. Peterson, and <u>M.E. Thompson</u>. *In vitro* cytotoxic activity of *Salvia officinalis* (sage) on triple negative breast cancer. American Society of Health-System Pharmacy (ASHP) Midyear Meeting, December, 2019.

Thompson, M.E. and L.D. Fitzgerald. Pathological Implications of BRCA1 O-β-glycosylation. Annual Meeting of the American Association of Colleges of Pharmacy, 2009.

Glover-Collins, K. and M.E. Thompson. Nuclear export of BRCA1 occurs during early S phase and is calcium-dependent. The Science of Cancer Health Disparities in Racial/Ethnic Minorities and the Medically Underserved, 2007.

Hinton, C.V. and <u>M.E. Thompson</u>. Heregulin beta 1 regulates nuclear localization of BRCA1. 95<sup>th</sup> Annual Meeting of the American Association for Cancer Research. 2004

Fitzgerald, L.D. and M.E. Thompson. The potential modification of BRCA1 by SUMO-1. 93<sup>rd</sup> Annual Meeting of the American Association for Cancer Research. 2002.

Hinton, C.V. and M.E. Thompson. Overexpression of BRCA1 is associated with decreased MAP kinase activity in breast cancer cells. 93<sup>rd</sup> Annual Meeting of the American Association for Cancer Research. 2002.

Griffin, B.A., A.N. Perry and M.E. Thompson. Reduced expression of importin  $\alpha$  in breast cancer cell lines hinders BRCA1 import.  $93^{rd}$  Annual Meeting of the American Association for Cancer Research. 2002.

<u>Thompson, M.E.</u>, C.L. Robinson-Benion, C.V. Hinton and J.T. Holt. A cancer associated mutation in a novel BRCA1 nuclear export signal. 93<sup>rd</sup> Annual Meeting of the American Association for Cancer Research. 2002.

<u>Thompson, M.E.</u> and J.G. Scammell. Superinduction of secretogranin II mRNA by cyclic AMP and cycloheximide in PC12 cells. 75th Annual Meeting of the Endocrine Society, 1993.

Thompson, M.E., W.E. Zimmer and J.G. Scammell. Prolactin granulogenesis in GH cells is

associated with increased granin expression and aggregation. 74th Annual Meeting of the Endocrine Society, 1992.

<u>Thompson, M.E.</u> and J.G. Scammell. Prolactin granulogenesis in GH<sub>4</sub>C<sub>1</sub> cells is associated with increased granin expression and aggregation with prolactin in the Golgi. 12th Annual Southeastern Pharmacology Society Meeting, 1991.

<u>Thompson, M.E.</u>, W.E. Zimmer, L.B. Wear, W.B. Huttner, W.J. Thompson and J.G. Scammell. Differential regulation of chromogranin B/secretogranin I and secretogranin II expression by forskolin in PC12 cells. 73rd Annual Meeting of the Endocrine Society, 1991.

Scammell, J.G., L.B. Wear and M.E. Thompson. Induction of chromogranin storage in PC12 cells by glucocorticoids. 72nd Annual Meeting of the Endocrine Society, 1990.

von Haven, R., <u>M.E. Thompson</u>, A.G. Brady, L.E. Williams, C.R. Abee and J.G. Scammell. Identification of multiple forms of prolactin and growth hormone in the squirrel monkey pituitary gland. Proceedings of the 12th Annual Meeting of the American Society of Primatologists, 1989.

<u>Thompson, M.E., C.L.</u> Bethea, K.K. Outlaw, C.R. Abee and J.G. Scammell. Physiological regulation of prolactin glycosylation in the rhesus monkey. American College of Clinical Pharmacology, 1988.

<u>Thompson, M.E.,</u> L.A. Macmillan, L.E. Williams, C.R. Abee and J.G. Scammell. Regulation of serum prolactin levels in the unanesthetized squirrel monkey. Proceedings of the 11th Annual Meeting of the American Society of Primatologists, 1988.

# Non-peer reviewed publications

Thorsen, C.A., M.E. Thompson, and M.B. Zimmer. The teaching chair: maintaining excellence in teaching. The Department Chair 34:13-14, 2023.