

## BIOGRAPHICAL SKETCH

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NAME Holick, Michael F.	POSITION TITLE Professor of Medicine, Physiology and Biophysics
eRA COMMONS USER NAME mfholick@bu.edu	

EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Seton Hall, New Jersey	BS	1968	Chemistry
University of Wisconsin, Madison	MS	1970	Biochemistry
University of Wisconsin, Madison	PhD	1971	Biochemistry
University of Wisconsin, Madison	MD	1976	Medicine

### A. Positions and Honors.

1971-75 Research Associate; Depart. of Biochemistry, University of Wisconsin, Madison, WI

1975-76 Research Associate, Endocrine Unit, Massachusetts General Hospital, Boston, MA

1976-77 Intern in Medicine, Massachusetts General Hospital, Boston, MA

1976-78 Clinical Fellow in Medicine, Harvard Medical School, Boston, MA

1977-78 Assistant Resident in Medicine, Massachusetts General Hospital, Boston, MA

1978-80 Clinical Assistant in Medicine, Massachusetts General Hospital

1978-81 Assistant Professor of Medicine, Harvard Medical School

1979-81 Lecturer, Massachusetts Institute of Technology, Cambridge, MA

1980 Assistant in Medicine, Massachusetts General Hospital

1981-85 Associate Professor of Medicine, Harvard Medical School

1981-85 Associate Professor of Nutritional Biochemistry, Massachusetts Institute of Technology, Cambridge, MA

1985-87 Professor of Physiology, Medicine, and Nutrition Tufts University

1985-87 Director of Vitamin D and Bone Metabolism, Laboratory USDA/Nutrition Research Center on Aging at Tufts University, Boston, MA

1986-93 Chief, Endocrine Unit; Boston City Hospital, Boston, MA

1986- Director, General Clinical Research Center; Boston, University

1986- Director Osteoporosis Diagnostic Center, Boston University School of Medicine

1987-2004 Professor of Medicine, Physiology, and Dermatology, Boston University School of Medicine

1993-1999 Chief, Section of Endocrinology, Nutrition and Diabetes, Boston Medical Center

2004- Professor of Medicine, Physiology and Biophysics, Boston University School of Medicine

2004- Chief Scientific Officer, IGI, Buena, New Jersey

### Awards

1972 Wilson S. Stone Memorial Award, M.D. Anderson Hospital, Houston, TX

1980 Fuller Albright Young Investigator Award

1981 Ten Outstanding Young Leaders Award

1983 Mead Johnson Award, American Institute of Nutrition

1985 Pisa Medalion for Excellence in Science, Pisa, Italy

1986 Merit Award, National Institutes of Health

1986 Stanley S. Bergan Award for excellence in the medical field, Seton Hall University

1989 Arnold-Rickle-Prize for research in UV radiation and vitamin D metabolism

1991 Osborne and Mendel Award, American Institute of Nutrition

1994 E.V. McCollum Award, American Society for Clinical Nutrition

2000 American Skin Association's Psoriasis Research Achievement Award

2002 American College of Nutrition's ACN Award  
 2003 Robert H Herman Memorial Award in Clinical Nutrition, American Society for Clinical Nutrition  
 2006 Annual General Clinical Research Centers Program Award for Excellence in Clinical Research. Washington, DC.

## B. Publications.

1. Perez A, Chen TC, Turner A, Raab R, Bhawan J, Poche P, and **Holick MF**. Efficacy and safety topical calcitriol (1,25-dihydroxyvitamin D<sub>3</sub>) for the treatment of psoriasis. *Br. J. Dermatol.* 1996;134:238-246.
2. Rolfdieter K, Buhring M, Hopfenmuller W, **Holick MF**, and Sharma AM. Ultraviolet B and blood pressure. *Lancet.* 1998;352:709-710.
3. Schwartz GG, Whitlatch LW, Chen TC, Lokeshwar BL, and **Holick MF**. Human prostate cells synthesize 1,25-dihydroxyvitamin D<sub>3</sub> from 25-hydroxyvitamin D<sub>3</sub>. *Cancer Epidemiology, Biomarkers & Prevention.* 1998;7:391-395.
4. Tangpricha V, Flanagan JN, Whitlatch LW, Tseng CC, Chen TC, Holt RR, Lipkin MS, and **Holick MF**. 25-Hydroxyvitamin D-1 $\alpha$ -hydroxylase in normal and malignant colon tissue. *Lancet.* 2001 May 26; 357:1673-1674.
5. Peters EMJ, Foitzik K, Paus R, Ray S, and **Holick MF**. A new strategy for modulating chemotherapy-induced alopecia, using PTH/PTHrP receptor agonist and antagonist. *J. Invest. Dermatol.* 2001;117:173-178.
6. Tangpricha V, Koutkia P, Rieke SM, Chen TC, Perez A, and **Holick MF**. Fortification of orange juice with vitamin D: A novel approach to enhance vitamin D nutritional health. *Am J Clin Nutr.* 2003;77:1478-83.
7. **Holick MF**, Chimeh FN, and Ray S. Topical PTH (1-34) is a novel, safe and effective treatment for psoriasis. *Br J Dermatol.* 2003;149:370-376.
8. **Holick MF**. Vitamin D: Importance in the prevention of cancers, type 1 diabetes, heart disease, and osteoporosis. *Am J Clin Nutr.* 2004;79:362-371.
9. **Holick MF**, Chimeh FN, and Ray S. Topical PTH (1-34) in a novel, safe and effective treatment for psoriasis. *Br J Dermatol.* 2003;149:370-376.
10. Sullivan SS, Cobb JL, Rosen CJ, **Holick MF**, Chen TC, Kimlin MG, and Parisi AV. Assessment of sun exposure in adolescent girls using activity diaries. *Nutr. Res.* 2003;23(5):631-644.
11. Moore C, Murphy MM, Keast DR, and **Holick MF**. Vitamin D intake in the United States. *J Am Diet Assoc.* 2004;104:980-983.
12. Durakovic C, Ray S, and **Holick MF**. Topical paricalcitol (19-nor-1 $\alpha$ ,25-dihydroxyvitamin D<sub>2</sub>) is a novel, safe and effective treatment for plaque psoriasis: a pilot study. *Brit J Dermatol.* 2004;151:190-195.
13. Klein GL, Chen TC, **Holick MF**, Langman CB, Price H, Celis MM, and Herndon DN. Synthesis of vitamin D in skin after burns. *The Lancet (Research Letters).* 2004;363:291-292.
14. Tangpricha V, Turner A, Spina C, Decastro S, Chen T, and **Holick MF**. Tanning is associated with optimal vitamin D status (serum 25-hydroxyvitamin D concentration) and higher bone mineral density. *Am J Clin Nutr.* 2004; 80:1645-1649.
15. Sullivan S, Rosen C, Halteman W, Chen T, and **Holick MF**. Adolescent girls in Maine are at risk for vitamin D insufficiency. *J Am Diet Assoc.* 2005;105:971-974.
16. Safer JD, Crawford TM, and **Holick MF**. Topical thyroid hormone accelerates wound healing in mice. *Endocrinol.* 2005;146(10):4425-4430.
17. Spina C, Tangpricha V, Yao M, Zhou W, Wolfe MM, Maehr H, Uskokovic M, Adorini L, and **Holick MF**. Colon cancer and solar ultraviolet B radiation and prevention and treatment of colon cancer in mice with vitamin D and its Gemini analogs. *J Steroid Biochem & Molecular Biol.* 2005;97:111-120.
18. Moore CE, Murphy MM, and **Holick MF**. Vitamin D intakes by children and adults in the United States differ among ethnic groups. *J Nutr.* 2005;135:2478-2485.
19. **Holick MF**, Siris ES, Binkley N, Beard MK, Khas A, Katzer JT, Petruschke RA, Chen E, and de Papp AE. Prevalence of vitamin D inadequacy among postmenopausal North American women receiving osteoporosis therapy. *J Clin Endocrinol Metab.* 2005; 90:3215-3224.
20. Gorham ED, Carland CF, Garland FC, Grant WB, Mohr SB, Lipkin M, Newmark H, Giovannucci E, Wei M, and **Holick MF**. Vitamin D and prevention of colorectal cancer. *J Steroid Biochem & Molecular Biol.* 2005;97:179-194.
21. **Holick, M.F.** High prevalence of vitamin D inadequacy and implications for health. *Mayo Clin. Proc.* 81(3):353-373, 2006.

22. **Holick, M.F.** Resurrection of vitamin D deficiency and rickets. J Clin Invest 116;8: 2062-2072, 2006.
23. Istfan NW, Person KS, **Holick MF**, Chen TC. 1 $\alpha$ ,25-Dihydroxyvitamin D and fish oil synergistically inhibit G<sub>1</sub>/S-phase transition in prostate cancer cells. J Steroid Biochem Mol Biol. Jan 11, 2007.

### **C. Research Support.**

#### **Ongoing Research Support**

**MO 1RR00533 Antman (PI) 12/1/06-11/30/12 48%**  
**NIH/NCRR**  
**General Clinical Research Center**

Dr. Holick is the Program Director for the General Clinical Research Center. The Clinical Research Center provides facilities, inpatient and outpatient, for clinical investigators associated with Boston University School of Medicine. The Center is located at Boston Medical Center and serves adult and pediatric subjects.

Role: Program Director

**R40MC03620-01 Bauchner (PI) 9/1/04-8/31/07 (4% effort) 0.48 Calendar Months**  
**HRSA/NIH**  
**Seasonal and Racial Variation in Vitamin D Deficiency of Newborns and Their Mothers.**

This study investigates the effect of race/ethnicity, skin color, lifestyle factors, and geography on vitamin D status and variance in newborns and their mothers.

Role: Co-Investigator

**National Dairy Council 1/1/06-12/31/08 2%**  
**Dietary Calcium and Vitamin D on Prostate Cancer**

This study evaluates the role of vitamin D and calcium status on prostate tumor growth.

Role: Co-Investigator

**1R41CA119802-01 Holick (PI) 8/31/06 – 8/31/07 10%**  
**PTH (7-34) for Chemotherapy Alopecia in Breast Cancer**

Role: Principal Investigator

#### **Completed Research Support**

Please list those completed in the last three years. No percent effort needed, just role on project.

#### **New England Research Institute**

R01-AG 20727

NIH (John McKinlay) 04/01/02-03/30/06

Co-Investigator

Bone Density in Older Men of Diverse Race/Ethnicity

The goal is to measure bone density and parameters of calcium and bone metabolism in 900 minority males living in Boston

#### **Michael F. Holick, Ph.D., M.D.**

2R01 AR36963

4/01/02-3/31/06

NIH/NIAMS

Principal Investigator  
Photobiology of Vitamin D

The goal of this research is to develop a better understanding about how vitamin D<sub>3</sub> is made and processed in the skin.

**Apollo Light Systems, Inc.**

1R4AG24061-0A1 (Henry Savage)

9/30/03-4/31/05

NIH (STTR)

Co-Investigator

Ultraviolet Light Devices for Vitamin D

The goal of this research is to determine the feasibility of developing ultraviolet B Light sources that can be used in a nursing home setting or in an individual home for promoting the cutaneous production of vitamin D<sub>3</sub>.