

**Martin F. Offield, Ph.D.**

Liberty University  
Dept. of Biology  
Lynchburg, VA 24502

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**EDUCATION:**

<b>Doctor of Philosophy, Cell Biology</b> Vanderbilt University	<b>1990-1996</b>
Texas A&M University (no degree received)	<b>1988-1990</b>
<b>Bachelor of Science, Biology</b> Liberty University	<b>1984-1988</b>

**TEACHING:**

<b>Associate Professor</b> Biology 101 Principles of Biology Biology 103 Principles of Biology Lab. Biology 403 Embryology Biochemistry 455 Biochemical & Molecular Tech. FRSM 101 Freshman Seminar	Dept of Biology, Liberty University	<b>2002-present</b>
<b>Instructor:</b> Biology 408 Developmental Biology	Dept of Biology, University of Virginia	<b>1999</b>
<b>Graduate Assistant:</b> Biology 101 Lab. Supervisor: Nina Caris	Dept of Biology, Texas A&M	<b>1988-1989</b>
<b>Undergraduate Assistant:</b> Biology 101 Lab. Supervisor: Paul Sattler	Dept of Biology, Liberty Univ.	<b>1985-1988</b>

**RESEARCH:**

<b>Research Scientist</b> The cloning and analysis of eyes absent family of genes in <i>Xenopus laevis</i> . The <i>Xenopus</i> clones were obtained through homology screens using the mouse homologs. Dominant active and dominant negative strategies of evaluating gene function were utilized. <b>Principal Investigator: Robert Grainger</b>	Dept of Biology, University of Virginia	<b>2001-2002</b>
<b>Research Associate</b> The development of the <i>Xenopus tropicalis</i> as both a genetic and embryological model system. This included the development of techniques for producing transgenic animals that resulted in numerous GFP reporter lines. These lines were utilized for probing questions of eye development and the patterning of the CNS. <b>Principal Investigators: Robert Grainger and Raymond Keller</b>	Dept of Biology, University of Virginia	<b>1996-2001</b>
<b>Doctoral Research</b> The role of Pdx-1, a pancreatic/duodenal homeobox gene, in the patterning and differentiation of the posterior foregut. <b>Advisor: Christopher Wright</b>	Dept of Cell Biology, Vanderbilt Univ.	<b>1991-1996</b>
<b>Master's Research</b> The development of an <i>in vitro</i> model system for testing neurotoxicity. <b>Advisor: E. Tiffany-Castiglioni</b>	Dept of Vet. Anat., Texas A&M	<b>1989-1990</b>

**SCHOLARSHIPS AND GRANTS AWARDED:**

NIH Post-doctoral Fellowship	Univ. of Virginia	<b>1998-2001</b>
NIH Salary Supplement	Vanderbilt Univ.	<b>1994-1996</b>

Harold Sterling Scholarship	Vanderbilt Univ.	1990-1994
NIH Graduate Fellowship	Vanderbilt Univ.	1990-1994

#### HONORS AND AWARDS:

Freshman Biology Award	Dept of Biology, Liberty University	1985
Senior Biology Award	Dept of Biology, Liberty University	1988
Graduated summa cum laude	Dept of Biology, Liberty University	1988
Who's Who in Amer. Colleges & Universities		1988
2nd Place Research Presentation	1996 SDB Meeting, Nashville, TN	1996
Who's Who in America		2008

#### ASSOCIATIONS:

FASEB		1998-present
Xenopus Conference		1996-present
Society for Developmental Biology		1994-present
American Assoc. for the Advancement of Science		1999-present

#### PUBLICATIONS:

Maureen Gannon, Elizabeth Tweedie Ables, Laura Crawford, David Lowe, **Martin F. Offield**, Mark A. Magnuson, Christopher V.E. Wright. (2008) Pdx-1 function is specifically required in embryonic  $\beta$  cells to generate appropriate numbers of endocrine cell types and maintain glucose homeostasis. *Developmental Biology* 314:406–417.

**Offield, M. F.**, Hirsh, N., Grainger, R.M. (2000) The development of *Xenopus tropicalis* transgenic lines and their use in studying lens developmental timing in living embryos. *Development* 127:1789-1797.

Amaya, E., **Offield, M. F.**, Grainger, R.M. (1998) Frog genetics: *Xenopus tropicalis* jumps into the future. *Trends in Genetics* 14(7):253-255.

Wu, K.L., Gannon, M., Peshavaria, M., **Offield, M. F.**, Henderson, E., Ray, M., Marks, A., Gamer, L.W., Wright, C.V., Stein, R. (1997) Hepatocyte nuclear factor 3beta is involved in pancreatic beta-cell-specific transcription of the *pdx-1* gene. *Mol. Cell Biol.* 17(10):6002-6013.

**Offield, M. F.**, Jetton, T. L., Labosky, P., Ray, M., Stein, R., Magnuson, M., Hogan, B. L. M., Wright, C. V. E. (1996) PDX-1 is required for pancreatic out-growth and differentiation of the rostral duodenum. *Development* 122:983-995.

#### PRESENTATIONS:

**Offield, M. F.**, (1999) Workshop in transgenic techniques for *Xenopus tropicalis*. *Xenopus tropicalis* Satellite meeting, Society for Developmental National Conference; Charlottesville, VA.

**Offield, M. F.**, Amaya, E., Grainger, R. M. (1998) Germline transmission of  $\gamma$ 1-crystallin/GFP-3 obtained in *Xenopus tropicalis* using Restriction Enzyme Mediated Integration (REMI). Society for Developmental Biology National Conference; Charlottesville, VA.

**Offield, M. F.**, Amaya, E., Grainger, R. M. (1998) Germline transmission and promoter mapping of  $\gamma$ 1-crystallin/GFP-3 in transgenic *X. laevis* and *X. tropicalis*. International *Xenopus* Conference; Sardina, Italy.

**Offield, M. F.**, Jetton, T. L., Labosky, P. (1996). The role of pdx-1 in pancreatic and duodenal development and foregut patterning. Society for Developmental Biology National Conference; Nashville, TN.

**Offield, M. F.** and Wright, C. V. E. (1994). The role of Cdx-4 in axis formation in mouse development. Society for Developmental Biology Southeastern Conference; Durham, NC.