MICHAEL DAVID WEST, B.S., M.S., Ph.D.

CURRICULUM VITAE
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Summary:

Dr. West is Co-Chief Executive Officer of BioTime, Inc. (NYSE MKT: BTX). BioTime and its subsidiaries are focused on developing an array of research and therapeutic products using pluripotent stem cell technology. He received his Ph.D. from Baylor College of Medicine in 1989 concentrating on the biology of cellular aging. He has focused his academic and business career on the application of developmental biology to the age-related degenerative disease. He was the founder and first CEO of Geron Corporation of Menlo Park, California (Nasdaq: GERN) and from 1992 to 1998 he was a Director, and Vice President, where he initiated and managed programs in telomerase diagnostics, oligonucleotide-based telomerase inhibition as anti-tumor therapy, and the cloning and use of telomerase in telomerase-mediated therapy wherein telomerase is utilized to immortalize human cells. From 1995 to 1998 he organized and managed the research collaboration between Geron and its academic collaborators James Thomson and John Gearhart that led to the first isolation of human embryonic stem and human embryonic germ cells. In 2013 he led BioTime's efforts to acquire Geron's stem cell assets now residing in the BioTime subsidiary Asterias Biotherapeutics (NYSE MKT: AST). From 1998 to 2007 he held positions as CEO, President, and Chief Scientific Officer at Advanced Cell Technology, Inc., which was acquired by Astellas Pharma, Inc., where he managed programs in nuclear transfer, retinal differentiation, and *PureStem*^{TM}, a technology for the multiplex derivation and characterization of diverse clonal human embryonic progenitor cell lines.

Personal:

Date and Place of Birth	April 28, 1953; Niles, Michigan
Citizenship	U.S.A.

Business Address

BioTime, Inc.
1301 Harbor Bay Pkwy
Alameda, CA 94502
Tel: (510) 521-3390 x303
Cell: (508) 904-7745

Email: mwest@biotimemail.com
Web site: www.michaelwest.org

Education:

Niles Senior High School; Niles, MI		1971
Rensselaer Polytechnic Institute; Troy, NY	B.S. Major: Psychology Minor: Management	1976
Andrews University; Berrien Springs, MI	M.S. Biology	1982
Baylor College of Medicine; Houston, TX	Ph.D. Cell Biology (Division of Molecular Virology)	1989
University of Texas Southwestern Medical Center at Dallas; Dallas, TX	Postdoc and Med. Student	1988-1992

Business Experience:

Geron Corporation (Nasdaq: GERN)	Founder, Director, Officer	1990-1998
Origen Therapeutics, Inc.	Founder, Chairman,	1997-1999
Advanced Cell Technology, Inc.	Chairman & CEO	1998-2004
(AKA Ocata Therapeutics, now now Astellas Pharma, Inc.) (NASDAQ: OCAT)	CSO	2004-2007
CIMA Biotechnology, Inc.	President & CEO	1999-2005
Cyagra, LLC.	President & CEO	2000-2002
A.C.T. Group, Inc.	Founder, Chairman, President & CEO	1999-2005
BioTime, Inc. (NYSE MKT: BTX)	CEO	2007-2015
	Co-CEO	2015-Present
ReCyte Therapeutics	CEO	2007-Present
OncoCyte Corporation	Board Member	2009-Present

BioTime Asia	CEO	2010-Present
ES Cell International	CEO	2010-1013
OrthoCyte Corporation	CEO	2010-Present
LifeMap Sciences	Board Member/CSO	2010-Present
Asterias Biotherapeutics (NYSE MKT: AST)	Board Member, VP	2013-Present
Asterias Biotherapeutics (NYSE MKT: AST)	CEO	2014

Additional Affiliations:

Ben-Gurion University of the Negev – Board of Governors

Research and Professional Experience:

2010-Present	Chief Executive Officer OrthoCyte Corporation 1301 Harbor Bay Pkwy Alameda, CA 94502
2014	Chief Executive Officer Asterias Biotherapeutics 230 Constitution Menlo Park, CA
2010-2013	Chief Executive Officer ES Cell International Pte. Ltd. Biopolis Street #01-03 Genome Singapore 138672
2010-2013	Chief Executive Officer BioTime Asia Hong Kong
2009-2011	Chief Executive Officer OncoCyte Corporation 1301 Harbor Bay Pkwy Alameda, CA 94502
2007-Present	Chief Executive Officer BioTime, Inc. (NYSE MKT: BTX) 1301 Harbor Bay Pkwy Alameda, CA 94502

2007-Present	Chief Executive Officer ReCyte Therapeutics. Inc. 1301 Harbor Bay Pkwy Alameda, CA 94502
2005-2008	Adjunct Professor Department of Bioengineering University of California, Berkeley
2004-2007	President, Chief Scientific Officer Advanced Cell Technology, Inc. (Re-named Ocata: Nasdaq: OCAT, now Astellas Pharma, Inc.) 381 Plantation St. Worcester, MA 01605
1998-2004	President, CEO, Chairman Advanced Cell Technology, Inc. (Re-named Ocata: Nasdaq: OCAT, now Astellas Pharma, Inc.) One Innovation Dr. Worcester, MA 01605
1999-2005	Founder, Chairman, President & CEO A.C.T. Group, Inc. (Holding company for OCAT) One Innovation Dr. Worcester, MA 01605
2003-Present:	Board Member BioTime, Inc.
2000-2002	President & CEO Cyagra, Inc. One Innovation Dr. Worcester, MA 01605
1997-1999	Founder, Chairman, Origen Therapeutics, Inc. 1450 Rollins Rd. Burlingame, CA 94080
1992-1998	Founder, VP, Chief Scientific Officer, VP New Technology Discovery Geron Coporation 230 Constitution Dr.

	Menlo Park, CA 94025
1990-1992	Founder, President & CEO Geron Coporation 200 Constitution Dr. Menlo Park, CA 94025
1990 - 1992	Senior Research Scientist Department of Cell Biology and Neuroscience Southwestern Medical School 5323 Harry Hines Blvd. Dallas, Texas 75235 Laboratories of: Dr. Woodring E. Wright Dr. Jerry W. Shay
1989 - 1990	Postdoctoral Research Fellow Department of Cell Biology and Neuroscience Southwestern Medical School 5323 Harry Hines Blvd. Dallas, Texas 75235 Laboratories of: Dr. Woodring E. Wright Dr. Jerry W. Shay
1985 - 1988	Graduate Student (Ph.D.) Baylor College of Medicine Division of Molecular Virology One Baylor Plaza Houston, TX 77030 Advisor: Dr. James R. Smith
1982 - 1985	Graduate Student (Doctoral Candidate) University of Arkansas for Medical Sciences Department of Biochemistry Little Rock, AR 72205

RESEARCH GRANT SUPPORT:

2009 (PI: West); (06/09- 05/12); California Institute for Regenerative Medicine; Addressing the Cell Purity and Identity Bottleneck through Generation and Expansion of Clonal Human Embryonic Progenitor Cell Lines, $4,721,706.

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Patents

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2. West, M.D., Shay, J., Wright, W. 1996. Therapy and Diagnosis of Conditions Related to Telomere Length and/or Telomerase Activity. U.S. Patent No. 5,489,508.

3. West, M.D. 1996. PADPRP Inhibitors to Treat Diseases Associated with Cellular Senescence. U.S. Patent No. 5,589,483.

4. Shay, J., West, M.D., and Wright, W.E. 1997. Methods for Cancer Diagnosis and Prognosis. U.S. Patent No. 5,639,613.

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6. West, M.D., Shay, J., and Wright, W.E. 1997. Telomerase Diagnostic Methods. U.S. Patent No. 5,648,215.

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39. West, M.D. Pluripotent Cells Comprising Allogenic Nucleus and Mitochondria. WO Patent No. 0179445.

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88. West, Michael D.; Chapman, Karen B. - Methods Using Gene Trapped Stem Cells For Marking Pathways Of Stem Cell Differentiation And Making And Isolating Differentiated Cells. WO04035748A3

89. West, Michael D. - A Bank Of Stem Cells For Producing Cells For Transplantation Having Hla Antigens Matching Those Of Transplant Recipients, And Methods For Making And Using Such A Stem Cell Bank. WO03100018A2

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