

Foteini Mourkioti, PhD

CURRICULUM VITAE

Stanford University School of Medicine
Baxter Laboratory for Stem Cell Biology
Clinical Sciences Research Center
269 Campus Drive, CCSR 3200
Stanford, CA 94305, USA

Lab phone: +1 650 723 6835
Cell phone: +1 650 906 3865
Email: fmourkio@stanford.edu

EDUCATION

- B.S. 1994-1998 University of Patras, Faculty of Biology, Greece.
Ph.D. 1998-2002 Max-Planck Institute for Biophysical Chemistry, Department of Molecular Developmental Biology, Göttingen, Germany. Advisor: Herbert Jäckle.

RESEARCH EXPERIENCE

- 2003-2008 Postdoctoral Fellow, EMBL Mouse Biology Unit (P.I. N. Rosenthal), Italy. Field: Inflammation and Muscle Regeneration, Mouse Genetics and Heart Disease Models. Advisor: Nadia A. Rosenthal.
- 2009-2011 Life Science Research Associate/Staff Scientist, Baxter Laboratory for Stem Cell Biology, Stanford University, USA, Field: Muscle Stem Cell Regulation, Dystrophic mouse models. Advisor: Helen M. Blau.

ACADEMIC APPOINTMENTS

- 2011-present Instructor, Baxter Laboratory for Stem Cell Biology, Stanford University, USA.

AWARDS, FELLOWSHIPS AND HONORS

- 2010-2014 American Heart Association Scientist Development Grant (#10SDG3510024), “A novel mouse model for Duchenne Muscular Dystrophy”.
- 2003-2007 European Molecular Biology Laboratory Postdoctoral fellowship.
- 2003 Honorarium from Max-Planck Institute, Germany.

SELECTED INVITED TALKS (INTERNATIONAL AND REGIONAL)

- 6/2013 Cardiac Biology-From Development to Regenerative Medicine Conference, Heidelberg, Germany.
- 8/2012 Stem Cells in Cancer and Regenerative Medicine Conference, Heidelberg, Germany.
- 9/2011 Gordon Research Conference (GRC), Myogenesis, New Horizons for Myogenesis, Waterville Valley, NH, USA.
- 06/2011 9th Annual Meeting International Society for Stem Research (ISSCR), Toronto, Ontario Canada.
- 10/2010 Seminar Series, Microbiology & Immunology Department, Stanford University.
- 09/2006 2nd Annual MYORES Congress - European muscle development network of excellence, Prague, Czech Republic.
- 05/2006 EUROPREVENT 2006 Conference, Athens, Greece.
- 04/2006 Harefield Heart Science Centre, Imperial College, London, UK.
- 10/2002 Fred Hutchinson Cancer Research Centre, Seattle, Washington, USA.

TEACHING/MENTORING EXPERIENCE

- 2011 Instructor at BIOE282 Course, entitled: “Performance, Development, and Adaptation of Skeletal Muscle” Stanford University, USA (fall quarter, course for advanced undergraduate and beginning graduate Stanford students).
- 2005-2008 Responsible for directing PhD students at EMBL, Italy.
- 2006 Teaching Assistant, EMBL Courses, Italy.

1997-1998 Teaching Assistant, Department of General Biology, Division of Basic Sciences, Faculty of Medicine, University of Patras, Greece.

MEETING ORGANIZATION

2007 Mini-Symposium on Cardiac & Skeletal Muscle Regenerative Mechanisms, Skiathos, Greece (Organizer).

LANGUAGES

Greek (native). English (First Certificate in English, University of Cambridge, UK, 1990), Italian (Certificato di livello base, 2004), German (basic).

REPORT OF CURRENT RESEARCH ACTIVITES

- Elucidation of Muscle Stem Cell Signaling in mdx/mTR mice
- Telomere shortening in skeletal muscles and hearts from patients with Duchenne Muscular Dystrophy
- New generation micro-dystrophin transfer in therapeutic amelioration of cardiac and skeletal muscle dystrophy of mdx/mTR mice
- Anti-oxidant therapy in cardiac failure of mdx/mTR dystrophic model

PUBLICATIONS

Manuscript under revision

Cosgrove, BD., Gilbert, PM., Porpiglia, E., **Mourkioti, F.**, Lee, SP., Corbel S.Y., Llewellyn, M.E., Delp, SL., Blau H.M. (2013) Strength Restored to Aged Mice Post-Injury by a Functionally Enhanced Muscle Stem Cell Population. *In revision, Nature Medicine.*

Original Papers and Reviews

Mourkioti, F., Kustan, J., Kraft, P., Way, JW., Zhao, MM., Kost-Alimova, M., Protopopov, A., DePinho, R., Bernstein, D., Meeker, AK., Blau, HM. (2013) Role of Telomere Dysfunction in Cardiac Failure in Duchenne Muscular Dystrophy. *In press, Nature Cell Biology.*

Sacco, A*, **Mourkioti, F***., Tran, R., Choi, J., Llewellyn, M., Kraft, P., Shkreli, M., Delp , S., Pomerantz, JH., Artandi, SE., Blau HM. (2010) Short Telomeres and Stem Cell Exhaustion Model Duchenne Muscular Dystrophy in mdx/mTR Mice. *Cell*, 143(7):1059-71. Epub 2010 Dec 9. *Authors contributed equally.

- This paper was highlighted in *Cell* under “Previews” section: Chamberlain, J.S. (2010) Duchenne Muscular Dystrophy Models Show Their Age. *Cell*, 143(7):1040-2.

Kratsios, P., Catela, C., Salimova, E., Huth, M., Berno, V., Rosenthal, N., and **Mourkioti, F.** (2010) Distinct roles for cell-autonomous Notch signaling in cardiomyocytes of the embryonic and adult heart. *Circ. Res.*, 106(3):559-72. Epub 2009 Dec 10.

Kratsios, P., Huth, M., Temmerman, L., Salimova, E., Al Banchaabouchi, M., Sgoifo, A., Manghi, M., Suzuki, K., Rosenthal, N., and **Mourkioti, F**.** (2010) Antioxidant amelioration of dilated cardiomyopathy caused by conditional deletion of NEMO/IKK γ in cardiomyocytes. *Circ Res.*, 106(1):133-44. Epub 2009 Oct. 22. ** corresponding author.

- This paper was highlighted in *Circulation Research* under “Editorials” section: Nemchenko, A., Hill, J.A. (2010) NEMO nuances NF-kappaB. *Circ. Res.* 106(1):10-2.

Ruffel, D*, **Mourkioti, F.***, Gambardella, A.*., Kirstetter, P., Lopez, R.G., Rosenthal, N. and Nerlov, C. (2009) A CREB-C/EPB β cascade induces M2 macrophage-specific gene expression and promotes muscle injury repair. *Proc Natl Acad Sci USA* 106(41): 17475-80 *Authors contributed equally.

Mourkioti, F., Slonimsky, E., Huth, M., Berno, V., and Rosenthal, N. (2008) Analysis of CRE-mediated recombination driven by myosin light chain 1/3 regulatory elements in embryonic and adult skeletal muscle: a tool to study fiber specification. *Genesis* 46(8):424-30.

Mourkioti, F.** and Rosenthal, N. (2008) NF-κB signaling in skeletal muscle: prospects for intervention in muscle diseases. *Journal of Molecular Medicine* 86(7):747-59. ** corresponding author and received the review invitation.

Lara-Pezzi, E., Paul, A., McCullagh, K., Winn, N., Slonimsky, E., Santini, M.P., **Mourkioti, F.**, Fukushima, S., Suzuki, K., and Rosenthal, N. (2007) A naturally occurring calcineurin variant inhibits FoxO activity and enhances skeletal muscle regeneration. *Journal of Cell Biology* 179(6):1205-18.

Mourkioti, F.**, Kratsios, P., Luedde, T., Adami, R., Parente, V., Bottinelli, R., Song, Y., Delafontaine, P., Pasparakis, M., and Rosenthal, N. (2006) Targeted ablation of IKK2 increases skeletal muscle strength, counters atrophy and promotes regeneration. *Journal of Clinical Investigation* 116(11): 2945-2954. **corresponding author. (Cover).

- This paper was highlighted in *Journal of Clinical Investigation* under “Commentaries” section: Karin, M. Role for IKK2 in muscle: waste not, want not. *J. Clin. Invest.* 116(11):2866-8.

Mourkioti, F. and Rosenthal, N. (2005) IGF-1, inflammation and stem cells: interactions during muscle regeneration. *Trends Immunol.* 26(10): 535-542.

Peter A, Schottler P, Werner M, Beinert N, Dowe G, Burkert P, **Mourkioti F**, Dentzer L, He Y, Deak P, Benos PV, Gatt MK, Murphy L, Harris D, Barrell B, Ferraz C, Vidal S, Brun C, Demaille J, Cadieu E, Dreano S, Gloux S, Lelaure V, Mottier S, Galibert F, Borkova D, Minana B, Kafatos FC, Bolshakov S, Siden-Kiamos I, Papagiannakis G, Spanos L, Louis C, Madueno E, de Pablos B, Modolell J, Bucheton A, Callister D, Campbell L, Henderson NS, McMillan PJ, Salles C, Tait E, Valenti P, Saunders RD, Billaud A, Pachter L, Klapper R, Janning W, Glover DM, Ashburner M, Bellen HJ, Jackle H, Schafer U. (2002) Mapping and identification of essential gene functions on the X chromosome of Drosophila. *EMBO Rep.* 3(1): 34-38.

Benos, P.V., Gatt, M.K., Murphy, L., Harris, D., Barrell, B., Ferraz, C., Vidal, S., Brun, C., Demaille, J., Cadieu, E., Dreano, S., Gloux, S., Lelaure, V., Mottier, S., Galibert, F., Borkova, D., Minana, B., Kafatos, F.C., Bolshakov, S., Siden-Kiamos, I., Papagiannakis, G., Spanos, L., Louis, C., Madueno, E., de Pablos, B., Modolell, J., Peter, A., Schottler, P., Werner, M., **Mourkioti, F.**, Beinert, N., Dowe, G., Schafer, U., Jackle, H., Bucheton, A., Callister, D., Campbell, L., Henderson, N.S., McMillan, P.J., Salles, C., Tait, E., Valenti, P., Saunders, R.D., Billaud, A., Pachter, L., Glover, D.M., and Ashburner, M. (2001) From first base: the sequence of the tip of the X chromosome of Drosophila melanogaster, a comparison of two sequencing strategies. *Genome Res.* 11(5): 710-730.

Benos, P.V., Gatt, M.K., Ashburner, M., Murphy, L., Harris, D., Barrell, B., Ferraz, C., Vidal, S., Brun, C., Demailles, J., Cadieu, E., Dreano, S., Gloux, S., Lelaure, V., Mottier, S., Galibert, F., Borkova, D., Minana, B., Kafatos, F.C., Louis, C., Siden-Kiamos, I., Bolshakov, S., Papagiannakis, G., Spanos, L., Cox, S., Madueno, E., de Pablos, B., Modolell, J., Peter, A., Schottler, P., Werner, M., **Mourkioti, F.**, Beinert, N., Dowe, G., Schafer, U., Jackle, H., Bucheton, A., Callister, D.M., Campbell, L.A., Darlamitsou, A., Henderson, N.S., McMillan, P.J., Salles, C., Tait, E.A., Valenti, P., Saunder, R.D., and Glover, D.M. (2000) From sequence to chromosome: the tip of the X chromosome of *D. melanogaster*. *Science* 287(5461): 2220-2222.