

CURRICULUM VITAE

Francisco J. Naya, Ph.D.

Associate Professor
Associate Chair of Cell and Molecular Biology
Department of Biology
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Education:

1982-1986 B.A., Biology and Psychology, Boston University, Boston, MA
1991-1997 Ph.D., Department of Cell Biology, Baylor College of Medicine, Houston, TX

Professional Experience:

1986-87 **Lab Coordinator/Research Assistant**, Boston University, Boston, MA
1987-89 **Research Associate I**, The Children's Hospital, Boston, MA
1989-91 **Research Associate II**, Children's Hospital, San Francisco, CA
1997-2001 **Postdoctoral Fellow**, Mentor: Eric N. Olson, Ph.D., The University of Texas Southwestern Medical Center, Dept. of Molecular Biology, Dallas, TX
2002-2011 **Assistant Professor**, Dept. of Biology, Boston University, Boston, MA
2011-present **Associate Chair**, Dept. of Biology, Boston University, Boston, MA
2011-present **Associate Professor**, Dept. of Biology, Boston University, Boston, MA
2017 **Visiting Scientist**, Division of Cardiology, Boston Children's Hospital

Honors and Awards:

1982-86 Boston University Scholarship/Grant
1983-84 Dean's List, Boston University
1992-93 Cell Biology Student Representative-Baylor College of Medicine
1993-94 Vice-chairperson, Graduate Student Council-Baylor College of Medicine
1995 Outstanding Platform Presentation, Texas Triangle Meeting in Molecular Medicine
1996 First Place Speaker Award, The 19th Annual Cell Biology Graduate Student Symposium
1997 Outstanding Graduate Student in Cell Biology
1997-2000 National Research Service Award/NIH Postdoctoral Fellowship

Review Activities:

Panel reviews -

2003-06 Committee member, American Heart Association, Northeast Affiliate 5A
2003-04,07 Reviewer (PI Grant applications), The Wellcome Trust
2004, 07 Reviewer (PI Grant applications), National Science Foundation
2006-07 Member (R33 Project grants), NIH, National Heart, Lung, and Blood Institute (NHLBI) Special Emphasis Panel, Exploratory Programs in Systems Biology
2008-10 Reviewer (PI Grant applications), Muscular Dystrophy Association

- 2009 Reviewer, Indo-US Science & Technology Forum (IUSSTF) Cardiovascular Biology
- 2010 Member, American Heart Association (National, Cardiac Bio BCT5)
- 2011 Reviewer, Grant application, Association Francaise contre les Myopathies (AFM)
- 2012 Member, Grant applications, American Heart Association (National, Cardiovascular Dev BSc3)
- 2012 Member, NIH R13 grants, NHLBI Conference Grant Review
- 2013 Reviewer, Grant application, Medical Research Council (London, England), Molecular and Cellular Medicine Board/Developmental Biology
- 2014 Member, NIH/NIGMS SCORE (Support of Competitive Research) Grant application study section
- 2014 Reviewer, Grant application-STEM CELLS, Association Francaise contre les Myopathies (AFM-Telethon)
- 2014 Reviewer, NIH ZRG1 F05-D(21) Cell Biology, Developmental Biology, and Bioengineering study section
- 2015 Reviewer, NIH R01 Cardiovascular Development and Differentiation (CDD) study section
Reviewer, American Heart Association (National, Cardiovascular Development BSc2/Cell Transport)
- 2016 Reviewer, National Science Foundation, MCB – Genetic Mechanisms
Reviewer, Medical Research Council (United Kingdom), Population and Systems Medicine Board – Musculoskeletal
Reviewer, NIH ZRG1 F05-D (21) L, Cell Biology, Developmental Biology, and Bioengineering study section
- 2017 Reviewer, National Science Foundation, MCB – Genetic Mechanisms
Reviewer, ANR, French National Research Agency
Permanent member, NIH R01 Cardiovascular Development and Differentiation (CDD) study section

Journal Reviews –

- 2002-2017 Molecular Endocrinology, Mechanisms of Development, Developmental Biology, Molecular and Cellular Biology, Circulation Research, Journal of Biomedicine and Biotechnology, Circulation, Proceedings of the National Academy of Sciences, Molecular Biology of the Cell, Genetics, Hypertension Research, PLoS ONE, Cell Biochemistry and Function, Journal of Molecular and Cellular Cardiology, Arteriosclerosis, Thrombosis and Vascular Biology (ATVB), Experimental and Molecular Pathology, Cell Death and Differentiation, BMC Genomics, Stem Cell Reviews and Reports, Journal of Translational Medicine, PLoS Genetics, International Journal of Molecular Sciences, BBA-Gene Regulatory Mechanisms, Journal of Comparative Physiology, Gene, Cells, The Journal of Cell Biology, Cardiovascular Diabetology, Oncotarget, Scientific Reports (Nature), Journal of Cellular and Molecular Medicine, Biochimie, Cellular Physiology and Biochemistry, BMC Genomics, G3, Circulation:Heart Failure, Molecular Neurobiology, Experimental and Molecular Medicine, Apoptosis

Service record (Undergraduate/Graduate School Committees):

Member – Faculty search committee, Neurobiology Program, Department of Biology, Boston University, 2017-18

Chair - Graduate Admissions Committee, Cell and Molecular Biology (CM) PhD Program, Boston University, 2011 – present

Graduate committee - Department of Biology, Fall 2016

Chair – Faculty search committee – Systems Biology candidates, Cell and Molecular Program, Department of Biology, academic year 2015-16

Faculty reviewer – Mid Tenure APT Review for Junior Faculty member, Department of Biology, March 2015

Faculty volunteer, CAS Open house/Freshman Fridays, Department of Biology, Boston University, 2015, 2016

Member – Animal Research Advisory Group, Boston University School of Medicine, Fall 2014 – present (discuss campus-wide issues pertaining to mice and other vertebrate animals)

Scientific Judge – Graduate Research Symposium, Boston University, 2016 (Spring)

Scientific Judge – BGSA Research Symposium/Department of Biology – January 2015

Chair – Faculty Merit Review, Dept. of Biology, Spring 2014

Committee member – Faculty Merit Review, Dept. of Biology, Spring 2013

Committee member – Beckman Foundation Scholars Program, Spring 2012

Chair – Faculty search committee – Systems Biology, Cell and Molecular Program, Department of Biology, academic year 2011-12

Member - Graduate Admissions Committee, Cell and Molecular Biology (CM) PhD Program, Boston University, 2002 – 2010

Member - Graduate Admissions Committee, Molecular, Cell Biology, and Biochemistry (MCBB) PhD Program, Boston University, 2003 – 2009

Interviewer, Molecular Biology, Cell Biology, and Biochemistry PhD Program, 2011, 2012

Scientific Judge – Science and Engineering Research Symposium, Boston University, evaluated poster presentations of 4-5 graduate students, 2011 (Spring), 2012 (Spring)

Medical School Admissions Committee, Modular Medical Integrated Curriculum (MMEDIC), Boston University and Boston University Medical School, 2004 – 2009; and Seven-Year Liberal Arts/Medical Education Program, Boston University College of Arts and Sciences and Medical School, 2006 - 2009

Institutional Animal Care and Use Committee (IACUC) Member, Boston University 2006 – 2009

Qualifying Written Examination Committee, CM and MCBB PhD programs, 2003 – 2005, 2010, 2011; and Bioinformatics PhD program, 2005 – 2009

Qualifying Written Examination Committee, Sargent College, 2010, 2011

Faculty Search Committee Member, Cell and Molecular Program, Department of Biology, Boston University, 2005-2008

Seminar Coordinator, CM and MCBB PhD Graduate Student Seminar Series, Department of Biology, 2006-2009

Faculty Advisor, Incoming Freshman Academic Orientation, Boston University, Summer 2004-present

Scientific Mentor, High School Honors Research Internship Program, Boston University, 2002 – 2004

Faculty volunteer, Freshman Fridays, College of Arts and Sciences, Boston University, 2002-03

Facilitator, CRC Program in Responsible Conduct of Research for trainees, Boston University, Spring 2005, Fall 2005

Grader (Fluency in Spanish), Spanish Language Examination, Master's and PhD students, Department of Biology, Boston University, 2002-2005

Translator (Fluency in Spanish), Spanish to English translation of recommendation letters for tenure and promotion review, Peter Doeringer (CAS)-Associate Dean for Faculty, 2006

Teaching activities:

BI 315-Systems Physiology, Fall 2002, 3 hours lecture/week, 127 students, Professors Cook and **Naya**

BI 553-Molecular Biology 2, Spring 2003, 3 hours lecture-1 hour discussion/week, 53 students, Professors Hansen and **Naya**, *discussion for PhD level students moderated by Professor Naya

BI 315-Systems Physiology, Fall 2003, 3 hours lecture/week, 136 students, Professors Cook and **Naya**
BI 553-Molecular Biology 2, Spring 2004, 3 hours lecture-1 hour discussion/week, 50 students, Professors Deshler and **Naya**, *discussion for PhD level students moderated by Professor Naya
BI 553-Molecular Biology 2, Spring 2005, 3 hours lecture-1 hour discussion/week, 43 students, Professor **Naya**, *discussion for PhD level students moderated by Professor Naya
BI 553-Molecular Biology 2, Spring 2006, 3 hours lecture-1 hour discussion/week, 38 students, Professor **Naya**, *discussion for PhD level students moderated by Professor Naya
BI 553-Molecular Biology 2, Spring 2007, 3 hours lecture-1hour discussion/week, 28 students, Professor **Naya**
BI 553-Molecular Biology 2, Spring 2008, 3 hours lecture-1hour discussion/week, 34 students, Professor **Naya**
BI 553-Molecular Biology 2, Spring 2009, 3 hours lecture-1hour discussion/week, 32 students, Professor **Naya**, *discussion for PhD level students moderated by Professor Naya
BI 553-Molecular Biology 2, Spring 2011, 3 hours lecture-1hour discussion/week, 35 students, Professor **Naya**
BI 553-Molecular Biology 2, Spring 2012, 3 hours lecture-1hour discussion/week, 34 students, Professor **Naya**
BI 553-Molecular Biology 2, Spring 2013, 3 hours lecture-1hour discussion/week, 18 students, Professor **Naya**
BI 553-Molecular Biology 2, Spring 2014, 3 hours lecture-1hour discussion/week, 30 students, Professor **Naya**
BI 213-Intensive Cell Biology, Fall 2014, 3 hours lecture-1hour discussion/week, 121 students, Professor **Naya**
BI 553-Molecular Biology 2, Spring 2015, 3 hours lecture-1hour discussion/week, 47 students, Professor **Naya**
BI 213-Intensive Cell Biology, Fall 2015, 3 hours lecture-1hour discussion/week, 106 students, Professor **Naya**
BI 553-Molecular Biology 2, Spring 2016, 3 hours lecture-1hour discussion/week, 23 students, Professor **Naya**
BI 213-Intensive Cell Biology, Fall 2016, 3 hours lecture-1hour discussion/week, 98 students, Professor **Naya**
BI 213-Intensive Cell Biology, Fall 2017, 3 hours lecture-1hour discussion/week, 95 students, Professor **Naya**
BI 553-Molecular Biology 2, Spring 2018, 3 hours lecture-1hour discussion/week, 26 students, Professor **Naya**

Undergraduate mentoring (research):

***Jennifer Durham, Directed Study, 2002-2004**

Kurt Eng, 2002-2003

Chris Ignatiou, Directed Study, 2002-2004

Ashley Leighton, Directed Study, 2002-2004

Eric Heckman, Directed Study, 2003-2004

Tommy Tomczyk, Directed Study, 2003-2004

Jessica Fischetti, Directed Study, 2002-2003

Pam Schulz, *Work for Distinction* and Directed Study, 2003-2004

***Hsuan-Ting (Emily) Huang, Work for Distinction and Directed Study, 2003-2005**

Priya Chandra, Directed Study, 2003

Stephanie Gan, volunteer, 2004

***Matthen Mathew**, *Work for Distinction* and Directed Study, 2005-2007

Olga Novikov, Directed Study, 2005-2007

Meg Wilson, Directed Study, 2005-2007

*Julie Donaghey, Directed Study, 2006-2008
John Kaminski, BA/MA in Biotechnology, 2006-2007
Heather deRivera, BA/MA in Biotechnology, 2006-2007
Danielle Desjardins, volunteer, 2007-2008
Stanley Lau, volunteer and *Work for Distinction*, 2007-2008
*Katie Davidoff, Directed Study and *Work for Distinction*, 2008-2010
*Yevgeniy Maksimenko, BA/MA in Biotechnology, 2009-2010
Gozde Guckaya, 2009-2010
*Min Young Cho, BA/MA in Biotechnology, 2009-2011
Aaron Held, BA/MA in Biotechnology, 2010-2011
Colleen Drapek, 2009-2012, *Beckman Scholar, Beckman Scholars Program*
*Nicole Acciavatti, BA/MA-Biotechnology, 2010-2012 (*CAS Summer Research Scholar 2011*)
*Yi Feng, lab research summer 2012 to present; awards - UROP (Fall 2012, Spring 2013); AHA fellowship, summer 2013
Sarah Nocco, research volunteer - Fall 2012; Beckman Scholar – Spring 2013 to present
Anna Melnick, research volunteer – summer 2013 to present
Bryan Duong, research volunteer – summer 2013 to present
Grace Stauffer, research volunteer – summer 2013
Olivia Cooper, work study – Fall 2013 - present
Akuah Kontor, research volunteer – Spring 2014 - present
Lauren Miller, BA/MA in Biotechnology, Spring 2014-December 2014
Jessica Pondish, summer 2015 - present, *UROP award Summer 2015, Fall 2015*
Natalie Moore, Fall 2015 – present, *UROP award Spring, Summer 2016*
Hoa Nguyen, Spring 2016 – present
Abby Eichelman, Spring 2016 – present; BA/MA in Biotechnology, *UROP award Summer 2016*
Zoe Tarasiewicz, Fall 2016 – present
Tarik Zahr, Fall 2016 – present
Arianna Bonilla, Fall 2016 - present
Christopher Petty, May 2017-present, *Beckman Scholar, Beckman Scholars Program*
Jeff Valisno, May 2017-present, SURF student
Paroma Mallick, May 2017-present, volunteer
Alina Carroll, Fall 2017, volunteer

[Bold] indicates that undergraduate was a **first author** on peer-reviewed publication
[Underline] indicates undergraduate was a contributing author on peer-reviewed publication.

Non-Boston University undergraduate students I have mentored in my laboratory-

Christina Jenkins, University of Virginia, summer 2005
Emily Rosowski, University of North Carolina, Chapel Hill, summer 2005
Tommy Kim, Washington University, St. Louis, summer 2013
Apolline Jungels, University of Rochester, summer 2016

SURF and PROSTARS undergraduate students-

Nathan Waldron, UMass-Dartmouth, SURF minority research internship program, summer 2008 and 2009
Adrienne Crooke, US Virgin Islands, SURF minority research internship program, summer 2009
Jason Silvestre, University of Florida, SURF minority research internship program, summer 2010
Alena Plotkin, PROSTARS Program at Boston University, summer 2010
Paula Hernandez, University of Puerto Rico, Rio Piedras, SURF minority research internship program, summer 2011
Angie Alegria, University of Miami, SURF minority research internship program, summer 2012

Deena Maurer, Marywood University, SURF minority research internship program, summer 2013

Keonna Hayes, Norfolk State University (VA), SURF minority research internship program, summer 2014

Nicole Clement-Gomez, Clarkson University, summer 2016

International Research Scholar-

Rodrigo Wagner Alves de Souza (University of Campinas – UNICAMP, Brazil; Bioscience Institute, Sao Paulo State University - UNESP, Botucatu, SP, Brazil), March – June 2012

Undergraduate academic advising-

I have advised approximately 20 students per semester in the Biology and Biochemistry and Molecular Biology (BMB) programs, 2002-present

High school students I have mentored in my laboratory-

Prestine Gusmanos, summer 2002, BU Academy

Stephanie Chan, summer 2003, BU Academy

Kristin Farahmand, summer 2003, BU Academy

Manessa Shaw, summer 2004, BU Academy

Alison Kung, summer 2004, BU Academy

*Jacqueline Hojilla, Research Internship in Science and Engineering (RISE), summer 2013

Amanda Jay, Greater Boston Area Research Opportunities for Young Women (GROW) summer research internship, summer 2017

Undergraduate Honors Dissertation committee membership-

Sam Bores, Work for Distinction/Biology, (Douglas Melton lab – Harvard; on campus sponsor – Naya), 2009

Steven Kim, Work for Distinction, April 2013

Marina Krykbaeva, Work for Distinction/Biology, April 2013

Nicole Repina, Work for Distinction/BMB (Amy Wagers lab – Harvard; sponsor - Naya), April 2013

Justin Morse, BMB Honors (Ion Hobai lab – BU School of Medicine); sponsor, April 2014

Qianhui (Stephanie) Liang, BMB Honors (Ulla Hansen lab); third reader, April 2014

Yi Feng, Biology (Naya lab), Kilachand Honors College; Mentor/First reader, April 2014

Anna Melnick, Biology (Naya lab), Kilachand Honors College; Mentor/First reader, April 2015

Julie Fishman, Biology Honors (Cyndi Bradham lab), second reader, April 2015

List of Graduate trainees:

Former-

MA students:

Lavanya Muthukumar, M.A. student, 2002-2004, Biology/CM, MA thesis title: “Role of the MEF2A Transcription Factor and a Downstream Target Gene in Cardiac Development”, Current position – Staff Scientist (Biotechnology company, India)

John Kaminski, BA/MA in Biotechnology, 2006-2007, MA thesis title: “Targeting the myospryn gene in embryonic stem cells”, Current position - MD/Ph.D. Student - UMass Medical School (Worcester, MA)

Heather deRivera, BA/MA in Biotechnology, 2006-2007, MA thesis title: “Targeting MEF2A for conditional knockout mice”, Current position - Staff Scientist (Biotechnology company, Boston area)

Yevgeniy Maksimenko, BA/MA in Biotechnology, 2009-2010, MA thesis title: “Generating MEF2D-specific Short Hairpin RNAs for Identifying the Transcriptional Profile Regulated by MEF2D in Striated Muscle”, Current position – Graduate Medical Sciences Program (Boston University)

Min Young Cho, BA/MA in Biotechnology, 2009-2011, MA thesis title: “MEF2A and STAT1 cooperatively activate Xirp2”

Aaron Held, BA/MA in Biotechnology, 2010-2011, MA thesis title: “MEF2A regulates Sfrp2 expression via the Gtl2-Dio3 miRNA cluster”

Nicole Acciavatti, BA/MA in Biotechnology, 2010-2012, MA thesis title: “Role of Focal Adhesion Kinase in *Mef2a* Gene Regulation”, Current position – Post-baccalaureate NIH Technical IRTA Program (Washington, D.C.)

Lauren Miller, BA/MA in Biotechnology, 2013-2014, MA thesis title: “Generation and functional characterization of epitope tagged MEF2D isoforms in adenovirus”

Kathryn Comeau, M.A. student, 2013-2015, Biology/CM, MA thesis title: “MEF2A functions in a genetic pathway downstream of dystrophin, the causative gene of Duchenne Muscular Dystrophy”

Heather Hook, M.A. student, Biology/CM, 2015-2017, MA thesis title: “*Gtl2* long noncoding RNA in cardiomyocyte homeostasis and hypertrophy”

PhD students:

Joseph G. Reynolds, PhD, 2003-2008, MCBB, “Myospryn functions as a muscle-specific PKA scaffolding protein and is dysregulated in muscular dystrophy”, Dissertation April 2008, Current position - Staff Scientist Merrimack Pharmaceuticals (Cambridge, MA).

Sarah A. McCalmon, PhD, 2004-2009, MCBB, “Characterization of the MEF2A target gene myomaxin and its role in angiotensin II-induced cardiac pathophysiology”, Dissertation October 2009, Current Position – Staff Scientist Pacific Biosciences (CA).

Ondra M. Kielbasa (formerly Ondra M. Brand), PhD, 2003-2010, Biology/CM, “Myospryn is a novel calcineurin-interacting protein that negatively modulates slow fiber-type and skeletal muscle regeneration”; Dissertation August 2010; Post-doctoral teaching fellow Department of Cell Biology (Harvard University Medical School); Current Position – Assistant Professor, Alvernia University, PA.

Elizabeth P. Ewen (formerly Elizabeth Braverman), PhD, 2003-2010, Biology/CM, “MEF2A coordinately regulates a costamere gene program in cardiac muscle”; Dissertation October 2010, Current Position – Scientist, Cellay, Inc. (Cambridge, MA).

Christine M. Snyder, PhD, 2006-2012, Biology/CM, “Wnt signaling in skeletal muscle regeneration is modulated by a MEF2A-regulated microRNA mega-cluster”, Dissertation January 2012, Current Position – Scientist, Biomet, LLC (Fair Lawn, NJ).

Nelsa L. Estrella, PhD 2009-2015, Biology/CM, “Gene Programs Regulated by MEF2 Transcription Factors in Rodent Striated Muscle Cells”, Dissertation April 2015, Current position – Senior Scientist, Sarepta Pharmaceuticals, Cambridge, MA.

Amanda L. Clark, PhD 2010-2015, Biology/CM, “MEF2-Regulated Gtl2-Dio3 Noncoding RNAs in Cardiac Muscle and Disease”, Dissertation November 2015, Current position – Senior Scientist, Biomere, Worcester, MA.

Cody A. Desjardins, PhD 2011-2017, Biology/CM, “The Myocyte Enhancer Factor-2 (MEF2) Family Mediates Complex Gene Regulatory Interactions in Striated Muscle”, Dissertation March 2017, Current position – Senior Scientist, Sarepta Pharmaceuticals, Cambridge, MA.

Jose L. Medrano, PhD 2010-2017, MCBB, “Transcription factor MEF2A fine-tunes gene expression in the atrial and ventricular chambers of the heart”, Dissertation December 2017, Current position – Postdoctoral teaching fellow, Department of Chemistry, Boston University.

Current-

PhD students:

Tiffany Dill, PhD graduate student, Biology/CM, 2013-present

Dissertation committee membership – over 40 PhD candidates (in addition to my own trainees)

Daniel Starczynowski, PhD, 2005, MCBB, Second reader
Demetri Kalaidzitdis, PhD, 2005, MCBB, Second reader
R. Bridge Hunter, PhD, 2004, Sargent College, Third reader
Alan Konkarevic, PhD 2006, Sargent College
Jie Chen, PhD, 2006, MCBB, Second reader
Nan Zhu, PhD, 2007, MCBB, Second reader
Roxanne Caccioppo, PhD, 2007, MCBB, Second reader
Chris Frenz, PhD, Biology, 2007
Joe St. George, PhD, Biology, 2007
Josh Leeman, PhD, 2008, Second reader
Bianca Heinrich, PhD, Biology/CM, 2008
Mini Holloway, PhD, 2008, MCBB, Third reader
Mike Garbati, PhD, 2009, Biology/CM, Second reader
Erin Coffee, PhD, 2010, MCBB
Julie Graham, PhD, 2010, MCBB
Joe Terragni, PhD, 2010, MCBB
Steve Mullenbrock, PhD, 2011, Biology/CM, Committee Chair
Meaghan Russell, PhD, 2011, MCBB, Committee Chair
Emily Pace, PhD, 2012, MCBB
Tara Conforto, PhD, 2012, Biology/CM
Cindy Griffin, PhD, 2012, Biology/CM
Mehtap Yilmaz, PhD, 2012, MCBB, Committee Chair
Brad Hogan, 2013, Biology/CM, Committee Chair
Ransom Poythress, PhD 2013, MCBB, second reader
Ryan Thompson, PhD 2013, Biology/CM, second reader
Chia-Ling Wu, PhD 2013, Sargent College
Sarah Sullivan, PhD 2013, Biology/CM
Angie Cornwell, PhD 2014, Sargent College
Derek Stefanik, PhD 2014, Biology/CM
Kellie Cotter, PhD 2014, MCBB – Second Reader
Leila Haery, PhD 2015, Biology/CM - Chair
Tracy Meehan, PhD 2015, Biology/CM, second reader
Michael Piacentino, PhD 2015, MCBB, second reader

Stephanie Wales, PhD 2016, Dept of Biology, York University (Toronto, Canada), external evaluator (scientific expert)
Jennifer Willoughby, PhD 2016, Biology/CM
Agnieszka Grzegorzewska, PhD 2016, MCBB, first reader
Anthony Accorsi, PhD 2017, Sargent College, second reader
Daphne Schatzberg, PhD 2017, Biology/CM
Christina Hao, PhD 2017, MCBB
Nicholas Lodato, PhD 2017, Biology/CM

PhD candidates

Sandy Serizier, PhD candidate, MCBB
Andy Rampersaud, PhD candidate, Bioinformatics
Ajit Kamath, PhD candidate, MCBB, Chair
Alla Yalonetskaya, PhD candidate, Biology/CM
Sanda Zolj, PhD candidate, Biology/CM
Michael St. Andre, PhD candidate, BU School of Medicine

Publications:

1. Dobi, E.T., **F.J. Naya**, and R.E. Hausman. 1988. Distribution of R-cognin and cholineacetyltransferase in the ganglion cell layer of developing chick neural retina. **Cell Differentiation**, v.22, pp. 115-124.
2. **Naya, F.J.**, M.D. Strathearn, and E.M. Spencer. 1991. Tissue expression and chromosomal localization of the human insulin-like growth factor binding protein 3. In: **Modern concepts of insulin-like growth factors** (ed. E. Martin Spencer), pp. 337-342. Elsevier, New York.
3. **Naya, F.J.**, C.M.M. Stellrecht, and M.-J. Tsai. 1995. Tissue-specific regulation of the insulin gene by a novel basic helix-loop-helix transcription factor. **Genes and Development**. v.9 (8): 1009-1019.
4. Peyton, M., C.M.M. Stellrecht, **F.J. Naya**, H.-P. Huang, P. J. Samora, and M.-J. Tsai. 1996. BETA3, a novel helix-loop-helix protein, can act as a negative regulator of BETA2 and MyoD responsive genes. **Mol. Cell. Biol.** v.16 (2): 626-633.
5. Mutoh, H., B.P. Fung, **F.J. Naya**, M.-J. Tsai, J. Nishitani, and A.B. Leiter. 1997. The basic helix-loop-helix transcription factor BETA2/NeuroD is expressed in mammalian enteroendocrine cells and activates secretin gene expression. **Proc. Natl. Acad. Sci. (U.S.A.)** v.94(8): 3560-3564.
6. Owerbach, D., **F.J. Naya**, M.-J. Tsai, S.V. Allander, D.R. Powell, and K.H. Gabbay. 1997. Analysis of candidate genes for the susceptibility to type I diabetes mellitus: a case control and familial association study of genes on chromosome 2q31-35. **Diabetes**. v.46(6): 1069-1074.
7. **Naya, F.J.**, H.-P. Huang, Y. Qiu, H. Mutoh, F.J. DeMayo, A.B. Leiter and M.-J. Tsai. 1997. Diabetes, defective pancreatic morphogenesis and abnormal enteroendocrine differentiation in BETA2/NeuroD-deficient mice. **Genes and Development**. v.11(18): 2323-2334.

8. Mutoh, H., **F.J. Naya**, M.-J. Tsai, and A.B. Leiter. 1998. The basic helix-loop-helix protein BETA2 interacts with p300 to coordinate differentiation of secretin-expressing enteroendocrine cells. **Genes and Development**. v.12(6): 820-830.
9. **Naya, F.J.**, C. Wu, J. A. Richardson, P. Overbeek, and E.N. Olson. 1999. Transcriptional activity of MEF2 during mouse embryogenesis monitored with a MEF2-dependent transgene. **Development**. v. 126(10), 2045-2052.
10. Musaro, A., K.J.A. McCullagh, **F.J. Naya**, E.N. Olson, and N. Rosenthal. 1999. IGF-I induces skeletal muscle hypertrophy through calcineurin in association with GATA-2 and NF-ATc1. **Nature**. v. 400(6744): 581-5.
11. **Naya, F.J.** and E.N. Olson. 1999. MEF2: a transcriptional target for signaling pathways controlling skeletal muscle growth and differentiation. **Curr. Opin. Cell Biol.** v. 11(6): 683-688.
12. Liu, M., S.J. Pleasure, A.E. Collins, J. Noebels, **F.J. Naya**, M.-J. Tsai, and D.H. Lowenstein. 2000. Loss of BETA2/NeuroD leads to malformation of the dentate gyrus and epilepsy. **Proc. Natl. Acad. Sci. (U.S.A.)**. v. 97(2); 865-70.
13. **Naya, F.J.**, B. Mercer, J. Shelton, J. Richardson, R.S. Williams, and E.N. Olson. 2000. Stimulation of skeletal muscle fiber type by calcineurin. **J. Biol. Chem.** v. 275(7): 4545-48.
14. Schwab, M.H., A. Bartholomae, B. Heimrich, D. Feldmeyer, S. Druffel-Augustin, S. Goebbels, **F.J. Naya**, S. Zhao, M. Frotscher, M.-J. Tsai, and K.A. Nave. 2000. Neuronal basic helix-loop-helix proteins (NEX and BETA2/Neuro D) regulate terminal granule cell differentiation in the hippocampus. **J. Neurosci.** v. 20(10): 3714-24.
15. Passier, R., H. Zeng, N.Frey, **F.J. Naya**, R.L. Nicol, T.A. McKinsey, P. Overbeek, J.A. Richardson, S.R. Grant, and E.N. Olson. 2000. CaM Kinase signaling induces cardiac hypertrophy and activates the MEF2 transcription factor in vivo. **J. Clin. Investigation**. v. 105(10): 1395-406.
16. Wu, H., **F.J. Naya**, T. McKinsey, B. Mercer, R. Bassel-Duby, E.N. Olson, and R.S. Williams. 2000. MEF2 responds to multiple calcium regulated signals in the control of skeletal muscle fiber type. **EMBO J.** v. 19(9): 1963-73.
17. Wu, H., B. Rothermel, S. Kanatous, P. Rosenberg, **F.J. Naya**, J.M. Shelton, K.A. Hutcheson, J.M. DiMaio, E.N. Olson, R. Bassel-Duby, and R.S. Williams. 2001. Activation of MEF2 by muscle activity is mediated through a calcineurin-dependent pathway. **EMBO J.** v.20(22): 6414-23.
18. **Naya, F.J.**, B. Black, H. Wu, J.A. Richardson, and E.N. Olson. 2002. Mitochondrial deficiency and cardiac sudden death in mice lacking the MEF2A transcription factor. **Nature Med.** v.8(11): 1303-1309.
19. Talmadge, R.J., J.S. Otis, M.R. Rittler, N.D. Garcia, S.R. Spencer, S.J. Lees, and **F.J. Naya**. 2004. Calcineurin activation influence muscle phenotype in a muscle-specific fashion. **BMC Cell Biology**. v.5(1):28.
20. Durham, J.T., O. Brand, M. Arnold, J.G. Reynolds, L. Muthukumar, H. Weiler, J.A. Richardson, and **F.J. Naya**. 2006. Myospryn is a direct transcriptional target for MEF2A that

encodes a striated muscle, alpha-actinin interacting, Z-disc protein. **J. Biol. Chem.** v.281(10):6841-9.

21. Huang, H-T, O. Brand, M. Mathew, C. Ignatiou, E.P. Ewen, S. McCalmon and **F.J. Naya**. 2006. Myomaxin is a novel transcription target of MEF2A that encodes a Xin related alpha-actinin interacting protein. **J. Biol. Chem.** v.281(51):39370-9.

22. Parsons, S.A., Millay, D.P., Sargent, M.A., **Naya, F.J.**, McNally, E.M., and Molkenin, J.D. 2007. Genetic disruption of calcineurin improves skeletal muscle pathology and cardiac function in a mouse model of limb-girdle muscular dystrophy. **J. Biol. Chem.** v.282(13):10068-78.

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