CURRICULUM VITAE

Francisco Jose Naya, Ph.D.

Director of Graduate Studies
Associate Professor
Department of Biology
Member, Whitaker Cardiovascular Institute
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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 Professor, Dept. of Biology, Boston University, Boston, MA
2017	Visiting Scientist, Div. of Cardiology (Da-Zhi Wang), Boston Children's Hospital
2011-2019	Associate Chair, Dept. of Biology, Boston University, Boston, MA
2019-present	Director of Graduate Studies, Dept. of Biology, Boston University, Boston, MA

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
2022	Nominated for 2023 Metcalf Teaching Award (Boston University)

Invited Seminars:

2003	The Center for Cardiovascular Sciences, Albany Medical College
2004	Whitaker Cardiovascular Institute, Boston University Medical School
	Sackler School of Graduate Biomedical Sciences, Tufts University Medical
	School
	Department of Medicine – Hypertension, Boston University Medical School
2005	Department of Genetics, Boston University School of Medicine
	Department of Biology, Boston College

2007	Oral presentation selection, Weinstein Cardiovascular Development Conference (Indianapolis, IN)
	Interdisciplinary Graduate Program, UMass Medical School (Worcester, MA) Department of Medicine, Cardiovascular Division, UMass Medical School
2008	Department of Nedictrie, Cardiovascular Division, Omass Medical School Department of Pediatrics, Weill Cornell Medical College (New York, NY)
2009	Whitaker Cardiovascular Institute, Boston University Medical School
2010	Lillehei Heart Institute, University of Minnesota Medical School (Minneapolis,
	MN)
2011	Oral presentation selection, Keystone Symposium: miRNA and Human Disease (Banff, Alberta)
	Department of Pediatrics, Seattle Children's Research Institute (Seattle, WA)
2012	Oral presentation selection, Frontiers in Myogenesis: Development, Function, and Repair of the muscle cell, Society for Muscle Biology, Kimmel Center – New
	York University
	Oral presentation selection, New Directions in the Biology and Disease of
2012	Skeletal Muscle, Fifth Biennial Conference, New Orleans, Louisiana
2013 2014	Invited Speaker, IMBC (International MADS Box Conference), New York
2014	Faculty speaker, Biology Alumni Event, Department of Biology, Boston University Men's Health Seminar Series, Section on Men's Health, Aging, and Metabolism, Brigham and Women's Hospital, Boston
2015	Organizing committee member and Session moderator, Weinstein
2010	Cardiovascular Development Conference (Boston, MA)
2016	Whitaker Cardiovascular Institute, Boston University Medical School
20.0	Department of Biology, Muscle Health Research Centre (MHRC), York University (Toronto, Canada)
	Dept of Biology-Ball State Univ and Center for Medical Education-Indiana
	University School of Medicine – Muncie (Indiana)
2017	Department of Biochemistry, Boston University Medical School
	Cardiovascular Research Institute, Masonic Medical Research Laboratory (Utica, NY)
	Department of Cardiology, Boston Children's Hospital (Harvard School of Medicine)
2018	Invited Speaker, American Heart Association Scientific Sessions 2017 (Anaheim, CA), Session on "HDAC Inhibition and Epigenetics in Cardiopulmonary Disease" Boston Muscle Meeting, Longwood Medical Area
2019	Invited speaker, Tsai Biomedical Research Symposium, Baylor College of Medicine (Houston, TX)

Conferences attended (Abstract/Poster presentations):

2002	Keystone Symposia, Molecular Biology of the Heart (Keystone, CO)
2003	Molecular Biology of Muscle Development and Regeneration (Alberta, Canada)
	Weinstein Cardiovascular Development Conference (Boston, MA)
2005	Keystone Symposia, Molecular Biology of Cardiac Diseases and Regeneration
	(Steamboat Springs, CO)
2006	New Directions in Biology and Disease of Skeletal Muscle (Dallas, TX)
2007	Second International Conference on Anchored cAMP Signaling Mechanisms
	(Portland, OR); Poster award: Honorable mention (Graduate student, Joseph
	Reynolds)
2009	Keystone Symposia, Cardiac Disease: Development, Regeneration, and Repair
	(Asheville, NC)
	Making Muscle in the Embryo and Adult, Columbia University (New York, NY)

2010	Keystone Symposia, Cardiovascular Development and Repair (Keystone, CO);
2011	NHLBI Scholarship Winner (Graduate student, Elizabeth Ewen) Keystone Symposium, miRNA and Human Disease (Banff, Alberta); Poster presented by graduate student Christine Snyder
	Experimental Biology 2011, "MEF2A regulation of a miRNA mega-cluster is required for proper skeletal muscle regeneration", Washington, DC.
	New Horizons in Myogenesis, "Wnt signaling in skeletal muscle regeneration is
	modulated by a Mef2A-dependent miRNA mega-cluster", (Waterville Valley Resort, Waterville Valley, NH)
2012	Frontiers in Myogenesis, "MEF2A regulates the <i>Gtl2-Dio3</i> miRNA mega-cluster
	to modulate Wnt signaling in skeletal muscle regeneration", (New York University, NY)
	New Directions in Biology and Disease of Skeletal Muscle, "MEF2A regulates the
	Gt/2-Dio3 miRNA mega-cluster to modulate Wnt signaling in skeletal muscle
2013	regeneration", (New Orleans, LA)
2013	IMBC (International MADS Box Conference), Canandaigua, NY Weinstein Cardiovascular Development Conference (Madrid, Spain)
2015	Weinstein Cardiovascular Development Conference (Madrid, Spairi) Weinstein Cardiovascular Development Conference (Boston, MA)
2016	Boston University Clinical and Translational Science Institute (BU-CTSI) Fifth
2010	Annual Translational Research Symposium
	Weinstein Cardiovascular Development Conference (Durham, NC)
2017	Keystone Symposia, Molecular Mechanisms of Heart Development (Keystone,
2017	CO)
2018	Genome Science Institute Symposium, Boston University School of Medicine (Graduate student, Tiffany Dill)
	Northeast Regional Beckman Symposium (Barnard/Columbia Univ., NY),
	"Altered dosage of noncoding RNAs expressed from the <i>Dlk1-Dio3</i> locus impairs skeletal muscle differentiation – (Student – Chris Petty)
2019	ASBMB/Experimental Biology (Orlando,FL), abstract/poster: "Altered dosage of
2010	noncoding RNAs expressed from the <i>Dlk1-Dio3</i> locus impairs skeletal muscle
	differentiation – (Student – Chris Petty)
2019	ABRCMS (Anaheim,CA), graduate program recruitment exhibit
2020	The Black Doctoral Network – virtual
	A professional event for undergraduate students who are interested in attending
	graduate school programs. It is also a professional event for job-market ready
	graduate students and advanced degree holders to meet with employers from
	universities, non-profits and corporate organizations.
	SACNAS, The National Diversity in STEM virtual Conference – virtual
	AAU PhD Education Initiative Forum - virtual
2021	NHLBI Long Non-coding (Lnc) RNAs Virtual Symposium – virtual
2022	Cold Spring Harbor Laboratory Meeting, Regulatory and Non-coding RNAs,
	(Abstract and talk given by graduate student, Amanda Pinheiro)
	SACNAS, The National Diversity in STEM Conference, Exhibitor (San Juan,
	Puerto Rico)
	SACNAS, The National Diversity in STEM Conference, Poster Presentation
	(Pamela Perez, SURF student in Francisco Naya's lab)

Review Activities:

Panel reviews 2003-06 Member, American Heart Association, Northeast Affiliate 5A study section
2003-04,07 Reviewer (PI Grant applications), The Wellcome Trust

2004, 07 2006-2007	Reviewer (PI Grant applications), National Science Foundation Member (R33 Project grants), NIH/NHLBI Special Emphasis Panel ZHL1 CSR-K
	M1, Exploratory Programs in Systems Biology
2008-2009	Reviewer (PI Grant applications), Muscular Dystrophy Association
2009	Reviewer, Indo-US Science & Technology Forum (IUSSTF) Cardiovascular
0040	Biology Manufacture Association (National Condition Bio BOTS at also a sation)
2010	Member, American Heart Association (National, Cardiac Bio BCT5 study section)
2011	Reviewer, Grant application-MYOLOGIE, Association Française contre les
2012	Myopathies (AFM) Member, Grant applications, American Heart Association (National,
2012	Cardiovascular Dev BSc3)
	Member, NIH R13 grants, NHLBI Conference Grant Review
2013	Reviewer, Grant application, Medical Research Council (London, England),
2013	Molecular and Cellular Medicine Board/Developmental Biology
2014	Member, NIH/NIGMS SCORE (Support of Competitive Research) Grant
2011	application study section – Developmental program for investigators at
	institutions focused on serving students from backgrounds underrepresented in
	biomedical and behavioral research
	Reviewer, Grant application-STEM CELLS, Association Francaise contre les
	Myopathies (AFM-Telethon)
	Member, NIH ZRG1 F05-D (21) Cell Biology, Developmental Biology, and
	Bioengineering study section
2015	Reviewer, NIH R01 Cardiovascular Development and Differentiation (CDD) study
	section
	Member, Grant applications, American Heart Association (National,
	Cardiovascular Development BSc2/Cell Transport)
2016	Ad hoc reviewer, National Science Foundation, MCB – Genetic Mechanisms
	Ad hoc reviewer, Medical Research Council (United Kingdom), Population and
	Systems Medicine Board - Musculoskeletal
	Member, NIH ZRG1 F05-D (21) L, Cell Biology, Developmental Biology, and
	Bioengineering study section
2017	Ad hoc reviewer, National Science Foundation, MCB – Genetic Mechanisms
	Ad hoc Reviewer, Agence Nationale de la Recherche (ANR), French National
	Research Agency
	Permanent member, NIH R01 Cardiovascular Development and Differentiation
2040	(CDD) study section
2018	Permanent member, NIH R01 Cardiovascular Development and Differentiation
2010	(CDD) study section
2019 2017-2021	Reviewer, NASA Space Biology ROSBio – Bion-M2 review panel Permanent member, NIH R01 Cardiovascular Development and Differentiation
2017-2021	(CDD) study section
2022	Reviewer, Medical Research Council (MRC), United Kingdom Research and
2022	Innovation (UKRI)
2023	Reviewer, Medical Research Council (MRC), United Kingdom Research and
2020	Innovation (UKRI)

<u>Journal Reviews</u> – 2002-2023 Mole

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

(JMCC), 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, Cells, The Journal of Cell Biology, Cardiovascular Diabetology, International Journal of Molecular Sciences, Oncotarget, Scientific Reports, Journal of Cellular and Molecular Medicine (JCMM), Journal of Comparative Physiology, Gene, Molecular Biology of the Cell, Oncotarget, Cellular and Molecular Life Sciences, Molecular Medicine Reports, Biochimie, Cellular Physiology and Biochemistry, G3, Circulation: Heart Failure, Molecular Neurobiology, Experimental & Molecular Medicine, Apoptosis, Gene, Biochimica Biophysica Acta (BBA Cancer), Developmental Dynamics, Molecules, Journal of Cardiology and Cardiovascular Sciences, Cell Biology and Toxicology, Journal of Cardiovascular Development and Disease (JCDD), JoVE, Cells, Regenerative Medicine Frontiers, Cell Reports, EBioMedicine, Birth Defects Research, Epigenomics, FEBS Letters, Biomolecules, Molecular Therapy: Nucleic Acids, Life Sciences, Biochemical Journal, Journal of Cachexia, Sarcopenia and Muscle (JCSM), BMC Molecular and Cellular Biology, Acta Physiologica, BBA (Molecular Cell Research), The Journal of Biological Chemistry (JBC), iScience, Journal of the American Heart Association (JAHA), Frontiers in Cell and Developmental **Biology**

2021-present <u>Editorial Board Member</u>, Journal of Cardiovascular Development and Disease (JCDD)

Service record (Undergraduate/Graduate School Committees):

Director of Graduate Studies, Dept. of Biology, Sept 2019 - present

Chair – Lecturer search committee – Cell and Molecular Program, Department of Biology, Fall 2020 – evaluated applications and interviewed candidates

Member – APT subcommittee tenure report and review, Department of Biology, Jan-April 2022 *Ad hoc member* – Graduate Committee, Dept. of Biology, August 2020

Member – Graduate Academic Affairs Committee (GAAC), Graduate School of Arts and Sciences, Boston University, Sept 2019-present

Chair - Merit Review Committee, Dept. of Biology, April/May 2021

Member – Merit Review Committee, Dept. of Biology, March 2020 - present

Member – Organizing Committee for UR BU Visitation Program (Underrepresented students in STEM), November 2019 - present

Member - Graduate Admissions Committee, Cell and Molecular Biology (CM) PhD Program, Boston University, 2019 - present

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

Symposium Judge – The Genome Science Institute (GSI) 2022 Annual research Symposium, Boston University School of Medicine, November 2022

Symposium Judge – Biology Graduate Student Association (BGSA) Annual research Symposium, Boston University Department of Biology, January 2020

Safe Haven Monitor, Conflicts of Interest Management Plan – Dr. Dean Tolan research project, Spring 2019 – present

Faculty volunteer, CAS Open House/Freshman Fridays, Department of Biology, Boston University, 2015, 2016, 2018, 2019

Member – Search committee for Lecturer position, Department of Biology, April-May 2019 *Member* – APT tenure report and review for Assistant Professors, Department of Biology, March 2019 Chair - Graduate Admissions Committee, Cell and Molecular Biology (CM) PhD Program, Boston University, 2011 – 2019

Symposium Judge – The Genome Science Institute (GSI) 2018 Annual research Symposium, Boston University School of Medicine, November 2018

Subcommittee member – APT tenure report and review for Assistant Professor (Cell and Molecular group), Department of Biology, March-September 2018

Participant - Faculty search, BioDesign Center (BDC), Boston University, 2018

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

Graduate committee - Department of Biology, Fall 2016 – evaluated graduate student annual reports and applications for travel awards

Chair – Faculty search committee – Systems Biology candidates, Cell and Molecular Program, Department of Biology, academic year 2015-16 (Fall 2015 – evaluated applications, Spring – interviewed candidates)

Faculty reviewer – Mid Tenure APT Review for Junior Faculty member (Cell and Molecular group), Department of Biology, March 2015

Scientific Judge – Graduate Research Symposium, Boston University, evaluated graduate student poster presentations, 2016 (Spring)

Scientific Judge – BGSA Research Symposium/Department of Biology – January 2015 Chair – Faculty Merit Review, Dept. of Biology, Spring 2014 (reviewed faculty annual reports and CVs and discussed their merits)

Committee member – Faculty Merit Review, Dept. of Biology, Spring 2013 (reviewed faculty annual reports and CVs and discussed their merits)

Committee member – Beckman Foundation Scholars Program, Spring 2012 (interviewed undergraduate finalists and discussed their merits)

Chair – Faculty search committee – Systems Biology, Cell and Molecular Program, Department of Biology, academic year 2011-12 (Fall – evaluated applications, Spring – interviewed candidates)

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

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

Interviewer, Molecular Biology, Cell Biology, and Biochemistry PhD Program, 2011-2016 (Spring)

Scientific Judge – Science and Engineering Research Symposium, Boston University, evaluated graduate student poster presentations, 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, 2016-2017; 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

→ Spring 2010 – Sabbatical

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 **Nava**

BI 553-Molecular Biology 2, Spring 2013, 3 hours lecture-1hour discussion/week, 18 students, Professor **Naya**, *discussion for PhD level students moderated by 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, 105 students, Professor **Naya**

BI 553-Molecular Biology 2, Spring 2016, 3 hours lecture-1hour discussion/week, 21 students, Professor **Naya**

BI 213/218-Intensive Cell Biology, Fall 2016, 3 hours lecture-1hour discussion/week, 98 students, Professor **Naya**

→ Spring 2017 – Sabbatical (Dr. Dazhi Wang lab, Division of Cardiology, Boston Children's Hospital)

BI 213/218-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, 24 students, Professor **Naya**

BI 213/218-Intensive Cell Biology, Fall 2018, 3 hours lecture-1hour discussion/week, 108 students, Professor **Naya**

BI 553-Molecular Biology 2, Spring 2019, 3 hours lecture-1hour discussion/week, 21 students, Professor **Naya**

BI 213/218-Intensive Cell Biology, Fall 2019, 3 hours lecture-1hour discussion/week, 105 students, Professor **Naya**

BI 553-Molecular Biology 2, Spring 2020, 3 hours lecture-1hour discussion/week, 33 students, Professor **Naya**

BI 203-Cell Biology, Summer 2020 (6 wks), 7.5 hours lecture-2 hour discussion/week, 31 students, Professor **Naya**

BI 213-Intensive Cell Biology, Fall 2020, 3 hours lecture-1hour discussion/week, 116 students, Professor **Naya**

BI 553-Molecular Biology 2, Spring 2021, 3 hours lecture-1hour discussion/week, 26 students, Professor **Naya**

BI 203-Cell Biology, Summer 2021 (6 wks), 7.5 hours lecture-2 hour discussion/week, 7 students, Professor **Naya**

BI 213/218-Intensive Cell Biology, Fall 2021, 3 hours lecture-1hour discussion/week, 121 students, Professor **Naya**

BI 553-Molecular Biology 2, Spring 2022, 3 hours lecture-1hour discussion/week, 35 students, Professor **Naya**

BI 213/218-Intensive Cell Biology, Fall 2022, 3 hours lecture-1hour discussion/week, 123 students, Professor **Naya**

BI 553-Molecular Biology 2, Spring 2023, 3 hours lecture-1hour discussion/week, 37 students, Professor **Naya**

Undergraduate mentoring (research):

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

Jennifer Durham, Directed Study, 2002-2004; UROP awards

Kurt Eng. volunteer, 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, *UROP awards Fall 2004 and Spring 2005; American Heart Association (AHA) summer fellowship 2004* Priya Chandra, Directed Study, 2003

Stephanie Gan, volunteer, 2004

Matthen Mathew, Work for Distinction and Directed Study, 2005-2007, UROP awards Summer and Fall 2005, Spring and Summer 2006; AHA summer fellowship 2005

Olga Novikov, Directed Study, 2005-2007

Meg Wilson, Directed Study, 2005-2007

<u>Julie Donaghey</u>, Directed Study, 2006-2008, *UROP awards Fall 2006, Spring and Summer 2007, Spring 2008*

John Kaminski, BA/MA in Biotechnology, 2006-2007

Heather deRivera, BA/MA in Biotechnology, 2006-2007

Danielle Desjardins, volunteer, 2007-2008, AHA summer fellowship 2007

Stanley Lau, volunteer and Work for Distinction, 2007-2008; Honors thesis

<u>Katie Davidoff</u>, Directed Study and *Work for Distinction*, 2008-2010, *UROP awards Summer and Fall 2008, Spring and Summer 2009*; Honors thesis

Yevgeniy Maksimenko, BA/MA in Biotechnology, 2009-2010, UROP awards Summer/Fall 2009 Gozde Guckaya, 2009-2010

Min Young Cho, BA/MA in Biotechnology, 2009-2011, UROP awards Spring/Summer/Fall 2010 Aaron Held, BA/MA in Biotechnology, 2010-2011

Colleen Drapek, 2009-2012, Beckman Scholar, Beckman Scholars Program 2010-2012

Nicole Acciavatti, BA/MA-Biotechnology, 2010-2012 (CAS Summer Research Scholar 2011)

Yi Feng, 2012-2014; UROP awards Fall 2012, Spring and Fall 2013; AHA undergraduate summer research fellowship 2013

<u>Sarah Nocco</u>, research volunteer - Fall 2012; *Beckman Scholar – Spring 2013 to Spring 2015* Anna Melnick, research volunteer – summer 2013 to present; *UROP award Spring and Fall 2014*; *AHA fellowship, summer 2014*

Bryan Duong, research volunteer – summer 2013

Grace Stauffer, research volunteer – summer 2013

Olivia Cooper, work study - Fall 2013 - 2015, UROP award Summer 2014

Akuah Kontor, research volunteer – Spring 2014 – Dec 2015, *UROP awards Summer and Fall 2014*; *AHA fellowship, summer 2015*

Lauren Miller, BA/MA in Biotechnology, Spring 2014-December 2014

Jessica Pondish, summer 2015 - May 2016, UROP award Summer 2015, Fall 2015

Natalie Moore, Fall 2015 - May 2017, UROP award Spring, Summer 2016, Fall 2016

Abigale Eichelman, Spring 2016 – May 2017; BA/MA in Biotechnology; New England Biolabs (NEB) award (Summer 2016), UROP Fall 2016

Hoa Nguyen, Spring 2016 – May 2018, *UROP Fall 2016, Fall 2017, Spring 2018*; Honors Thesis (2018)

Zoe Tarasiewicz, Fall 2016 – December 2017

Tarik Zahr, Fall 2016 – May 2018, UROP summer 2017; Honors thesis (2018)

Arianna Bonilla, January 2017 - May 2018

Paroma Mallick, May 2017-May 2018, volunteer

Christopher Petty, May 2017-May 2019, *Beckman Scholar, Beckman Scholars Program*; Honors thesis (2018)

Alina Carroll, Fall 2017 – May 2019, UROP funding summer 2018

Angelica Benaim, summer 2018-Fall 2019; UROP funding summer 2018, Fall 2018, Summer 2019

Preeya Thomas, Fall 2018-Fall 2019

Paulina Fiejtek, Spring 2019-Fall 2019

Breanna Dooling, Spring 2019-May 2020, UROP funding summer 2019

Jack Drummond, Spring 2018-May 2020, UROP funding Fall 2018

Kara Sevola, Spring 2018-May 2020

Alden Lebov, Fall 2019-May 2020

Roxanna Altus, Summer 2019-Spring 2020, UROP funding summer 2019 (Mark Rieman Prize) Jiachen Gao, Fall 2019-Fall 2020

Sarah Schumacher, Fall 2019-May 2021 (UROP SRA funding Spring 2020)

Isabelle Guelin, Fall 2019-May 2021, Honors in Chemistry

Jessi Hsu, Spring 2020 – Fall 2020

Rebecca Stout, Spring 2020 – Fall 2020

Cameryn Boggio-Shean, Fall 2020 - May 2022

Sean Gow, Summer 2021- 2022

Emily Feng, Fall 2021-Spring 2022

Natalia Kanj, Summer 2021-present

Eric Yin, Fall 2021-present

*Erica Broeker, Fall 2021-present (recipient of Loren E. Wold Research Award, Summer 2022), UROP (Summer 2022)

Nicole Zakskorn, January 2023-present (BA/MA in Biotechnology)

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

Adrianne 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 (PA), 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 (NY), summer 2016

Jeff Valisno, Boston University, SURF student, summer 2017

Tia Walker, Penn State University, SURF student, summer 2018

Christopher Anjorin, Texas A&M University, SURF student, summer 2019

Pamela Perez, Cornell University, "Understanding chromatin dynamics in muscle cells harboring a mutation in the *Dlk1-Dio3* noncoding RNA locus", SURF student, summer 2022 Jasmine Yetunde Akinpelu, University of Georgia, SURF student, summer 2023

International Research Scholar-

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

Undergraduate academic advising-

I have advised approximately 20-25 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

Sara Bottome, "RNA interference approach to knock down Rian IncRNA in skeletal muscle in vivo", RISE, summer 2018

Erin Kiley, "Adeno-associated virus mediated approach to inhibit Meg3 IncRNA in the heart", GROW summer research internship, summer 2018

Anusha Srinasavan, "RNA interference approach to knock down Rian IncRNA in skeletal muscle in vivo", RISE, summer 2019

Ranya Paul, "Muscle-specific expression of adenovirus mediated delivery of Meg3 IncRNA and beta-galactosidase", GROW summer research internship, summer 2019

Evelyn Nguyen, "Gene expression of the *Dlk1-Dio3* non-coding RNA locus in C2C12 cells", RISE summer internship program (2022)

Undergraduate Honors Dissertation committee membership-

Pamela Schultz, Work for Distinction/BMB (Naya lab), 2004

Hsuan-Ting Huang, Work for Distinction/BMB (Naya lab), 2005

Stanley Lau, Work for Distinction/BMB (Naya lab), 2008

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

Katharine Davidoff, Work for Distinction/Biology (Naya lab), 2010

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; <u>on campus sponsor - Naya</u>), April 2013

Justin Morse, BMB Honors (Ion Hobai lab – BU School of Medicine); on campus 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

Jessica Perez, CMG Biology Honors Thesis, third reader, May 2018

Hoa Nguyen, BMB Honors Thesis (Naya lab), first reader, May 2018

Tarik Zahr, CMG Biology Honors thesis (Naya lab), first reader, May 2018

Christopher Petty, BMB Honors thesis (Naya lab), first reader, May 2018

Alina Carroll, BMB Honors thesis (Naya lab), first reader, May 2019

Kevin Kuang, Biology Honors thesis (Valentina Perissi lab), first reader (sponsor), May 2019

Angelica Benaim, Chemistry Honors thesis (Naya lab), first reader, December 2019

Breanna Dooling, Biology Honors thesis (Naya lab), first reader, April 2020

Yunkang (Sunny) Lin, Biology Honors thesis (Mikael Pittet lab, Harvard), first reader (sponsor), April 2020

Ryan Stagg, Biology Honors thesis (Angela Koehler lab, MIT), Sponsor, April 2020

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"

Christopher Petty, M.A. student, BMB, 2018-2019, MA thesis title: "Altered dosage of noncoding RNAs expressed from the *Dlk1-Dio3* locus impairs skeletal muscle differentiation"

Kara Sevola, M.A. student, BMB, 2019-present, MA thesis title: "Early germ layer development in embryonic stem cell derived embryoid bodies is dependent on the IncRNA *Meg3*"

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 – Associate 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 – Genome Software FAS Manager Scientist, Agilent (Lexington, 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 – Associate Director, Entrada Therapeutics (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, Dyne (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.

Tiffany Dill, PhD 2013-2020, Biology/CM, "The long noncoding RNA Meg3 regulates myoblast plasticity and muscle regeneration through epithelial mesenchymal transition", Dissertation December 2020, Current position – Senior Scientist, Entrada Therapeutics.

Current-

PhD students:

Amanda Pinheiro, PhD graduate student (third year), MCBB, 2020-present Chelsea Lopez, PhD graduate student (fourth year), Biology/CM, 2019-present

MA students:

Hannah Sutton, MA graduate student, MCBB, 2018-present

Non-Biology graduate students I have mentored in my laboratory-

Rebekah Miller, Bioinformatics PhD student wet-lab experience –summer 2019 Eric Palangues Tost, Bioinformatics PhD student wet-lab experience – summer 2022

<u>Dissertation committee membership</u> – over 40 PhD and MA candidates (**in addition to my own trainees**)

Former PhD students:

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, Chair

Agnieszka Grzegorzewska, PhD 2016, MCBB, first reader

Anthony Accorsi, PhD 2016, Sargent College, Second reader

Daphne Schatzberg, PhD 2017, Biology/CM

Peng-Ying (Christina) Hao, PhD 2017, MCBB

Nicholas Lodato, PhD 2017, Biology/CM

Ajit Kamath, PhD 2018, MCBB, Chair

Sanda Zoli, PhD 2018, Biology/CM, second reader

Alla Yalonetskava, PhD 2019, Biology/CM

Andy Rampersaud, PhD 2019, Bioinformatics

Jessica Keenan, PhD 2019, Bioinformatics

Sandy Serizier, PhD 2020, MCBB, Chair

Daniel Zuch, PhD 2020, MCBB, Chair

Andressa Mota, PhD 2020, MCBB, Third reader

Michael St. Andre, PhD 2021, BU School of Medicine

Heather Hook, PhD 2022, Biology/CM

Current PhD candidates

Christopher DiRusso, PhD candidate, Biology/CM

James Huth, PhD candidate, Biology/CM

Abigail Descoteaux, PhD candidate, Biology/CM

Katie Kaplan, PhD candidate, MCBB

Cameron Dixon, PhD candidate, Biology/CM

Johan Martinez-Fuentes, PhD candidate, Biology/CM

MA students

Rawabi Zahed, MA student (McCall lab), 2009; Naya – second reader

Calvin Wang, MA student (Jenna Holloway lab, Mass General), 2017, GMS Boston University

Medical School, Naya – first reader (Charles River Campus sponsor)

Clarissa Santoso, MA student (McCall lab), 2017, Biology/CM; Naya – second reader Anushya Pandian, MA in MCBB (Ulla Hansen lab, Biology), 2018, Title: Establishing a biotin based affinity system to uncover LSF's role in immortalized hepatocytes; Naya – third reader Kanwal Aziz, MA in Biology (Cynthia Bradham lab), 2018, Title: Role of dual specificity phosphatases in skeletal patterning of sea urchins embryos during development; Naya – second reader

Aparna Sreeram, MA in Biology (Hengye Man lab), 2019, Title: Ubiquilin-2 associates with ubiquitinated AMPA receptors for proteasomal degradation; Naya – second reader Janet Shi, MS (Vandana Gupta lab), Boston University School of Medicine, 2022, Title: Characterization of a Zebrafish model of Congenital Myopathy for therapeutic developments; Naya – first reader (sponsor)

Caroline Murphy, MS (Ben Wolozin lab), Boston University School of Medicine, 2022, Title: KSHV-ORF57 INHIBITS STRESS GRANULE ASSEMBLY AND MAY BE A NOVEL BIOTHERAPEUTIC FOR NEURODEGENERATIVE DISEASES – second reader

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 2g31-35. **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 alphaactinin 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 Molkentin, 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.
- 23. Reynolds, J.G., S.A. McCalmon, T. Tomczyk and **F.J. Naya**. 2007. Identification and mapping of protein kinase A (PKA) anchoring motifs in the costameric protein myospryn. **Biochim Biophys Acta**. v.1773:891-902.
- 24. Reynolds, J.G., S.A. McCalmon, J. Donaghey and **F.J. Naya**. 2008. Deregulated PKA signaling and myospryn expression in muscular dystrophy. **J Biol Chem. Accelerated Publication.** v.283(13):8070-4.
- 25. Otten, J., P.F. van der Ven, P. Vakeel, S. Eulitz, G. Kirfel, O. Brandau, M. Boesl, J.W. Schrickel, M. Linhart, K. Hayess, **F.J. Naya**, H. Milting, R. Meyer, and D.O. Furst. 2009. Complete loss of murine Xin results in a mild cardiac phenotype with altered distribution of intercalated discs. **Cardiovasc Res.** 85(4): 739-50.
- 26. McCalmon, S.A., D. Desjardins, S. Ahmad, K. Davidoff, C.M. Snyder, K. Sato, K. Ohashi, O. Kielbasa, M. Mathew, E.P. Ewen, H. Gavras, K. Walsh, and **F.J. Naya**. 2010. Modulation of angiotensin II-mediated cardiac remodeling by the MEF2A target gene Xirp2. **Circ Res.** 106(5): 952-60.
- 27. Konno, T., D. Chen, L. Wang, H. Wakimoto, P. Teekakirikul, M. Nayor, M. Kawana, K. Pandya, O. Smithies, **F.J. Naya**, E.N. Olson, J. G. Seidman and C.E. Seidman. 2010. Heterogeneous Mef2 activation in myocytes predicts focal scarring in hypertrophic cardiomyopathy. **Proc Natl Acad Sci USA**. 107(42):18097-102.
- 28. Kielbasa OM, Reynolds JG, Wu CL, Snyder CM, Cho MY, Weiler H, Kandarian S, **Naya FJ**. 2011. Myospryn is a calcineurin-interacting protein that negatively modulates slow-fiber-type transformation and skeletal muscle regeneration. **FASEB J**. 25(7):2276-86.
- 29. Ewen, E.P., C.M. Snyder, M. Wilson, D. Desjardins, and **F.J. Naya**. 2011. The Mef2A transcription factor coordinately regulates a costamere gene program in cardiac muscle. **J Biol Chem.** 286(34):29644-53.
- 30. Snyder, C.M., A. Rice, N. Estrella, A. Held, S.C. Kandarian, and **F.J. Naya**. 2013. MEF2A regulates the *Gtl2-Dio3* microRNA mega-cluster to modulate Wnt signaling in skeletal muscle regeneration. **Development**. 140:31-42. *Special mention in the "In This Issue" section in the journal *Development*.
- 31. Estrella, N.L. and **F.J. Naya**. 2014. Transcriptional networks regulating the costamere, sarcomere, and other cytoskeletal structures in striated muscle. **Cell Mol Life Sci. Review**. 71(9):1641-1656.
- 32. Estrella N.L., C.A. Desjardins, S.E. Nocco, A.L. Clark, Y. Maksimenko, and **F.J. Naya**. 2015. MEF2 transcription factors regulate distinct gene programs in mammalian skeletal muscle differentiation. **J Biol Chem**. 290(2): 1256-68.

- 33. Feng Y, C.A. Desjardins, O. Cooper, A. Kontor, S.E. Nocco, and **F.J. Naya**. 2015. EGR1 Functions as a Potent Repressor of MEF2 Transcriptional Activity. **PLoS ONE**. 10(5):e0127641.
- 34. Clark, A.L. and **F.J. Naya**. 2015. MicroRNAs in the MEF2-regulated *Gtl2-Dio3* Noncoding RNA Locus Promote Cardiomyocyte Proliferation by Targeting the Transcriptional Coactivator Cited2. **J Biol Chem**. 290(38): 23162-72.
- 35. Estrella, N.L., A.L. Clark, C.A. Desjardins, S.E. Nocco, and **F.J. Naya**. 2015. MEF2D Deficiency in Neonatal Cardiomyocytes Triggers Cell Cycle Re-entry and Programmed Cell Death *in vitro*. **J Biol Chem**. 290(40): 24367-80.
- 36. Clark, A.L., S. Maruyama, S. Sano, A. Accorsi, M. Girgenrath, K. Walsh, and **F.J. Naya**. 2016. miR-410 and miR-495 are dynamically regulated in diverse cardiomyopathies and their inhibition attenuates pathological hypertrophy. **PLoS ONE**. 11(3):e0151515.
- 37. **Naya**, **F.J.** and D.Z. Wang. 2016. (MYO)SLIDing our way into the vascular pool of long noncoding RNAs. **Arterioscler Thromb Vasc Biol**. 36(10):2033-4. **Invited Editorial**.
- 38. Desjardins, C.A. and **F.J. Naya**. 2016. The Function of the MEF2 Transcription Factor Family in Cardiac Development, Cardiogenomics, and Direct Reprogramming. **J Cardiovasc Dev Dis.** 3(3): 26. **Review**.
- 39. Desjardins, C.A. and **F.J. Naya**. 2017. Antagonistic regulation of cell cycle and differentiation gene programs in neonatal cardiomyocytes by homologous MEF2 transcription factors. **J Biol Chem.** 292(25): 10613-10629.
- 40. Medrano, J.L. and **F.J. Naya**. 2017. The transcription factor MEF2A fine-tunes gene expression in the atrial and ventricular chambers of the adult heart. **J Biol Chem**. 292(51): 20975-20988.
- 41. Dill, T.L. and **F.J. Naya**. 2018. A Hearty Dose of Noncoding RNAs: The Imprinted DLK1-DIO3 Locus in Cardiac Development and Disease. **J Cardiovasc Dev Dis**. 5(3). pii: E37. doi: 10.3390/jcdd5030037.
- 42. Farrell, E., A.E. Armstrong, A.C. Grimes, **F.J. Naya**, W.J. de Lange, and J.C. Ralphe. 2018. Transcriptome analysis of cardiac hypertrophic growth in MYBPC3-null mice suggests early responders in hypertrophic remodeling. **Frontiers in Physiology**. 9:1442. eCollection.
- 43. Hsiung, A., **F.J. Naya**, X. Chen, and R. Shiang. 2019. A Schizophrenia Associated CMYA5 Allele Displays Differential Binding with Desmin. **J Psychiatric Res.** 111:8-15.
- 44. Guo H., Lu Y Wei, Li Z., Huang Z-P., Liu J., Hu X., Ma Q., Lin J L.-C., Lin J J.-C., **Naya F.**, Pu W.T., and D-Z Wang. 2020. Intercalated disc protein Xin β is required for Hippo-YAP signaling in the heart. **Nat Commun**. 11(1):4666.
- 45. Lee T., Cho I.S., Bashyal N., **Naya F.J.**, Tsai M.J., Yoon J.S., Choi J.M., Park C.H., Kim S.S., and Suh-Kim H. 2020. ERK Regulates NeuroD1-Mediated Neurite Outgrowth via Proteasomal Degradation. **Exp Neurobiol**. 29(3):189-206.
- 46. Dill, T.L., A. Carroll, A. Pinheiro, J. Gao, and **F.J. Naya**. 2021. The long noncoding RNA *Meg3* regulates myoblast plasticity and muscle regeneration through epithelial-mesenchymal transition. **Development**: dev.194027 doi: 10.1242/dev.194027.

- 47. Pinheiro, A. and **F.J. Naya**. 2021. The key Inc(RNA)s in cardiac and skeletal muscle development, regeneration, and disease. **J Cardiovasc Dev Dis.** *8*(8), 84; https://doi.org/jcdd8080084
- 48. Lu F., Q. Ma, W. Xie, C.L. Liou, D. Zhang, M.E. Sweat, B.D. Jardin, **F.J. Naya**, Y. Guo, H. Cheng, and W.T. Pu. 2022. CMYA5 establishes cardiac dyad architecture and positioning. **Nat Commun.** 13(1):2185.