Curriculum Vitae

Aikaterini Kontrogianni-Konstantopoulos, Ph.D.
Professor, Department of Biochemistry and Molecular Biology
University of Maryland School of Medicine

Personal Information

Department of Biochemistry and Molecular Biology
University of Maryland School of Medicine
108 N. Greene Street
Baltimore, MD 21201, USA
Tel: (410) 706-5788
Fax: (410) 706-8297
e-mail: akontrogianni@som.umaryland.edu

Education

1992 Bachelor of Science, Dept. of Biology,
University of Patras, Patras, Greece

1997 Ph.D., Dept. of Cell Biology
Baylor College of Medicine, Houston, TX

Post Graduate Education and Training

1997-2000 *Post-doctoral Fellow* (*Advisor: E.J., Benz, Jr., M.D.*); Johns Hopkins University, School of Medicine, Dept. of Medicine, Division of Hematology, Baltimore, MD

2001-2002 *Research Fellow* (*Advisor: R.J., Bloch, Ph.D.*); Interdisciplinary Training Program in Muscle Biology, Dept. of Physiology, University of Maryland School of Medicine

Employment History

2002-2003 *Research Associate*; Dept. of Physiology, University of Maryland School of Medicine

2003-2007 *Assistant Professor (non-tenure track);* Dept. of Physiology, University of Maryland School of Medicine

2007-2012 *Assistant Professor (tenure track)*; Dept. of Biochemistry and Molecular Biology, University of Maryland School of Medicine

2012-2016 *Associate Professor (tenure track)*; Dept. of Biochemistry and Molecular Biology, University of Maryland School of Medicine

2016-June '17 *Associate Professor* (*tenured*); Dept. of Biochemistry and Molecular Biology, University of Maryland School of Medicine

July '17 Professor; Dept. of Biochemistry and Molecular Biology, University of Maryland School of Medicine

Affiliations

2007-2015 Associate Member, Biochemistry Graduate Program
University of Maryland School of Medicine

2008-2015 Associate Member, Molecular Medicine Graduate Program
University of Maryland School of Medicine

2013-present Member, UM Marlene and Stewart Greenebaum Comprehensive Cancer Center
Program in Oncology

2015-present Regular Member, Biochemistry Graduate Program
University of Maryland School of Medicine

2015-present Regular Member, Molecular Medicine Graduate Program
University of Maryland School of Medicine

Professional Memberships

2001-present American Society for Cell Biology
2005-present Biophysical Society
2011-present American Physiological Society
2012-present American Association for Cancer Research
2018-present American Heart Association

Honors and Awards

1988-1992, Award for Excellence in Academic Performance, Institute of National Scholarships, Greece

1993-1994 Graduate Student Scholarship, Department of Cell Biology, Baylor College of Medicine, Houston, Texas

1996 Scholarship Award in Recognition of Excellence in Academic Achievement, Hellenic Professional Society of Texas

1998, 1999 Travel Award, American Society of Hematology

1999-2001 National Institute of Health (NIH) Training Grant, Johns Hopkins University, School of Medicine, Division of Hematology, Dept. of Medicine, Baltimore, MD

2000 Research Fellow Investigator Award, Research Retreat, Johns Hopkins University, School of Medicine, Division of Hematology, Dept. of Medicine, Baltimore, MD

2000-2002 American Heart Association, Mid-Atlantic Affiliate Post-doctoral Fellowship

2001-2002 National Institute of Health (NIH) Training Grant, University of Maryland Baltimore, School of Medicine, Interdisciplinary Training Program in Muscle Biology

2018 Woman Scientist of the Year, Greece

2018 Dr. Patricia Sokolove Outstanding Mentor Award, University of Maryland Graduate School

Administrative Service

Department of Biochemistry and Molecular Biology, University of Maryland School of Medicine

2007-present **Member;** Biochemistry and Molecular Biology-Graduate Recruiting Committee; I have been actively involved in graduate student recruiting by visiting colleges and universities, where I give research lectures, provide an overview of major scientific areas within the Dept. of Biochemistry and Molecular Biology and UMSOM, and

participate in informal discussions and career panels for students. This activity involves visiting several undergraduate institutions yearly.

2011-2013 **Alternate Representative;** Biochemistry and Molecular Biology-School of Medicine Council

2013-present **Co-Chair**; Biochemistry and Molecular Biology-Research Committee

2013-present **Member;** Biochemistry and Molecular Biology-Political Action Advisory Committee; I serve as an advocate for improved science funding during visits with Federal Congressmen and Senators on Capitol Hill. I visit with multiple senators and congressman at each yearly visit.

2014-present **Member;** Biochemistry and Molecular Biology-Steering Committee

2017-present **Member;** Biochemistry and Molecular Biology-Appointment Promotion & Tenure Committee

University of Maryland School of Medicine

2002-2007 **Director;** UMSOM Biacore Facility

2007-present **Interviewer;** UMSOM Medical School Admissions & Advisory Committee

2010-present **Member;** GPILS Governing Committee, Biochemistry Joint Graduate Program

2010-2018 **Member;** NIH/NIAMS Interdisciplinary Training Program in Muscle Biology Steering Committee

2014-present **Member;** Nathan Schnaper Intern Program (NSIP) Selection Committee; I serve in evaluating undergraduate student applicants for summer cancer research positions in the UMGCCC cancer center and the School of Medicine

2014-present **Member;** University of Maryland-College Park (UMCP) & UMSOM Undergraduate Program Selection Committee; I evaluate the applications of UMCP undergraduate students interested to perform summer research at UMSOM

2015-2018 **Member;** UM Graduate Council-Graduate Faculty Committee

2015-2017 **Co-organizer;** Training Program in Integrative Membrane Biology and Interdisciplinary Training Program in Muscle Biology Annual Joint Retreat, I served as co-organizer with Dr. Martin Schneider of this joint training program retreat

2015 **Organizer and Moderator**; Training Program in Integrative Membrane Biology and Interdisciplinary Training Program in Muscle Biology Annual Joint Retreat Career Development Round Table; I assumed a major leadership role in organizing a Career Development section, which involved inviting key NIH institute leaders, including the late Dr. Steven Katz, Director of NIAMS, and Dr. Amanda Boyce, Program Director of NIAMS, as well as prominent faculty from other institutions, including Dr. Elizabeth McNally, Professor and Director of the Center for Genetic Medicine at Northwestern University, to discuss career issues with students and faculty

2016 **Organizer and Moderator**; Training Program in Integrative Membrane Biology and Interdisciplinary Training Program in Muscle Biology Annual Joint Retreat Career Development Round Table; I assumed a major leadership role in organizing a Career Development section, which involved inviting key NIH institute leaders, including Dr. Helen Lin, Scientific Review Officer of NIAMS, and prominent

faculty from UMSOM and other institutions, including Dr. Jean-Pierre Raufman, Moses and Helen Golden Paulson Professor and Head of Medicine at UMSOM, and Dr. Robert Dirksen, Lewis Pratt Ross Professor and Chair of Pharmacology and Physiology at University of Rochester Medical Center, to discuss career issues with students and faculty

2016-present **Member/Interviewer;** UMSOM MSTP Admissions & Advisory Committee; this activity involves interviewing and assessing the promise of multiple MSTP Program candidates during the yearly interview cycle

2018-2019 **Co-director**; National Institute of Health (NIH) Interdisciplinary Training Program in Muscle Biology

2019-2020 **Member;** UMSOM Preclerkship working group/Medical School Curriculum Reform Committee

2019-onwards **Director;** National Institute of Health (NIH) Interdisciplinary Training Program in Muscle Biology

2020-present **Member**; UMSOM Postdoctoral Recruitment Committee

2020-2023 **Member**; UMSOM Research Affairs Advisory Committee

2020-2021 **Member**; UMSOM Search Committee for Director of the Program of Comparative Medicine and Veterinary Resources

University of Maryland School of Medicine, (other)

2011 **Judge;** UM Marlene and Stewart Greenebaum Comprehensive Cancer Center, Cancer Biology Retreat

2013 **Judge;** UMSOM Graduate Research Conference

2015 **Judge;** UMSOM Graduate Research Conference

2016 **Member;** UMSOM Research Strategic Plan (2017-2021) Committee, **Subpanel Co-Leader** charged with developing and finalizing Goal 1 of the University of Maryland School of Medicine Research Strategic Plan titled: "*Enhancing Departmental, Center, Institute and Institutional Research Collaboration*"

2016 **Member;** UMSOM GPILS and OPS Awards Committee

2016 **Member;** UMSOM STRAP 20 by '20 Faculty Recruitment Initiative Committee, I currently serve on this search committee to identify candidates for a faculty position in the Departments of Biochemistry and Molecular Biology, and Pathology joint STRAP initiative

2017 **Judge;** UMSOM Graduate Research Conference

2018 **Judge;** UMSOM Graduate Research Conference

2018-2019 **Member**; Biochemistry & Molecular Biology/Pathology Muscle Biology Faculty Search Committee

2019 **Judge;** UMSOM Graduate Research Conference

National

2006-2010	**Study Section Member (Ad hoc)**; National Institutes of Health/National Institute of Arthritis and Musculoskeletal and Skin Diseases; Special Emphasis Panel
2007-2008	**Study Section Member (Ad hoc)**; National Science Foundation Scientific Review Panel
2008-2015	**Regular Study Section Member;** American Heart Association; Peer Review Study Group, Basic Cell 3 Region II
2011	**Panelist;** American Society of Cell Biology, Discussion Focus Group
2011-2013	**Program Committee Member;** Biophysical Society Meeting
2012	**Session Organizer and Chair;** FASEB-Experimental Biology Meeting, Session: Cell Motility in Health and Disease
2015-2016	**Study Section Member (Ad hoc);** National Institutes of Health/National Heart, Lung and Blood Institute; HLBP 1 Cardiac Myosin Binding Protein-C: Structure, Function, and Regulation study section
2015-present	**Study Section Member (Ad hoc);** Muscular Dystrophy Association; Scientific Advisory Committee
2015-present	**Study Section Member (Ad hoc);** Muscular Dystrophy Association; Medical Advisory Committee
2016	**Study Section Member (Ad hoc);** National Institutes of Health/National Institute of Arthritis and Musculoskeletal and Skin Diseases; Skeletal Muscle Biology and Exercise Physiology (SMEP) study section
2016	**Contributor**; American Physiological Society, Handbook of Physiology series, Comprehensive Physiology, "*Thick Filaments Proteins and Structure*", *(Invited by Dr. Andrew Judge, Editor of Skeletal Muscle section)*
2016	**Co-organizer and Moderator;** One-day Satellite Workshop on Titin, Myosin Binding Protein-C and Obscurin "*Titin and its binding partners myosin binding protein-C and Obscurin in health and disease"*, Loyola University Chicago, Maywood, IL
2016	**Study Section Member**; American Heart Association, Heart Failure Strategically Focused Research Network Center Grants Basic Project Review Committee-Phase I
2016	**Study Section Member;** American Heart Association, Heart Failure Strategically Focused Research Network Center Grants Review Committee-Phase II
2016-present	**Committee Member**; American Heart Association, Strategically Focused Heart Failure Research Network Oversight Advisory Committee
2016-present	**Invited Moderator;** American Heart Association, Go Red For Women & Heart Failure Annual Meeting Breakout Sessions focused on Career development, Grant writing, and Lifestyle
2016-2018	**Study Section Member**; American Heart Association, Merit Award Committee
2017	**Study Section Member (Ad hoc);** National Institutes of Health; Intercellular Interactions (ICI) study section
2017-onwards	**Editorial Board Member;** Scientific Reports (Cell Biology)

2018	**Study Section Member (Ad hoc);** National Institutes of Health; Special Emphasis Panel, Fellowship: Cell Biology, Developmental Biology, and Bioengineering (F05-U)
2018	**Study Section Member (Ad hoc);** National Institutes of Health; Cardiac Contractility and Heart Failure study section
2018	**Vice-Chair;** American Heart Association, Heart Failure Strategically Focused Research Network Center Oversight Advisory Committee
2019	**Co-Chair**; 63rd Biophysical Society Meeting, *"Platform: Myosin and Skeletal/Smooth Muscle Mechanics, Structure and Regulation*"
2019	**Chair**; American Heart Association-Basic Cardiovascular Sciences Meeting; "*Rare Genetic Diseases in the Heart*"
2019-2020	**Regular Member**; NIH, Cardiac Contractility and Heart Failure Study Section
10/2019	**Co-Chair;** NIH, Cardiac Contractility and Heart Failure Study Section
2019-onwards	**Member,** American Heart Association Research Leaders Academy Planning Committee
2020-2022	**Member**, American Heart Association Basic Cardiovascular Sciences (BCVS) Specialty Conference Program Committee-BCVS Council
2020	**Reviewer (Ad hoc);** National Science Foundation
2021-2023	**Chair;** National Institutes of Health Integrative Muscle Physiology and Pathophysiology-A Study Section
2021-2025	**Study Section Member (Regular)**; National Institutes of Health Integrative Muscle Physiology and Pathophysiology-A Study Section

International

2010	**Study Section Member;** Cancer Research Foundation, United Kingdom; Biological Sciences Committee
2010-2012	**Lead Guest Editor;** Journal of Biomedicine and Biotechnology, Special Volume on "*Advances on Muscle Physiology and Pathophysiology*"
2013-2014	**Primary Editor;** Frontiers in Physiology, Special Volume on "*Striated Muscle: a Highly Organized System of Unraveling Mystery*"
2013-present	**Study Section Member**; National Science Center, Poland; Review Panel II
2015	**Study Section Member**; French National Research Agency, France
2015	**Session Chair;** 20th World Congress on Advances in Oncology and 18th International Symposium of Molecular Medicine; Athens, Greece, Breast Cancer session
2017	**Session Chair;** 10th Annual World Cancer Congress, Barcelona, Spain; Molecular Carcinogenesis, Oncogenes and Tumor Suppressors in Cancer
2017	**Scientific Advisory Board Member;** European Union Actin cytoskeleton in striated muscle function in Health And Disease-EU AHEAD project (coordinator: Dr. Marie-Louise Bang).
2017	**Study Section Member (Ad hoc)**; Medical Research Council, United Kingdom

2018	**Session Organizer and Chair**; 47th European Muscle Conference, Budapest, Hungary; "*Muscle development, regeneration and disease*" session
2018-2019	**Lead Guest Editor**; Journal of Muscle Research and Cell Motility, Special Volume on "*Muscle development, regeneration and disease*"
2021-2022	**Member and Session Organizer;** Scientific Committee, 2nd Olympiad in Cardiovascular Medicine; Athens Greece

Manuscript Reviewer

2006, 2008, 2013-2014	American Journal of Physiology-Cell Physiology
2006-2007, 2009	Cell Motility and Cytoskeleton
2006	Experimental Cell Research, Expert Reviews in Cardiovascular Therapy, Future Cardiology
2007	FEBS Letters, Trends in Cell Biology, Muscle Nerve
2008	American Journal of Pathology, Cell Biology International
2008-2011, 2013-2015	Journal of Molecular and Cellular Cardiology
2009, 2014-2015	American Journal of Physiology-Heart and Circulatory Physiology
2009-2010	EMBO Reports
2009	Journal of Cell Science
2010	Biochemica *et* Biophysica Acta-Proteins and Proteomics, International Journal of Biochemistry and Cell Biology
2011	Biochemical Journal, Expert Opinion in Therapeutic Targets
2011-2012	Journal of Biotechnology and Biomedicine
2011-2015	Journal of Physiology
2012	Journal of Biological Chemistry, PLOS Genetics, BMC-Cell Biology
2013	Plos One, BBA-Proteins and Proteomics
2014	Open Biology, Oncotarget
2015	Human Molecular Genetics, Oncogene, International Journal of Biochemistry and Cell Biology
2016	American Journal of Physiology-Cell Physiology, The International Journal of Biochemistry and Cell Biology, BMC Medical Genetics
2017	Molecular Carcinogenesis, Oncotarget, Scientific Reports, American Journal of Physiology-Cell Physiology
2018	Open Biology, Scientific Reports, Frontiers in Oncology, American Journal of Physiology-Heart Physiology, FASEB Journal, Communications Biology, Frontiers in Physiology, Human Molecular Genetics, The International Journal of Biochemistry and Cell Biology
2019	BMC Biology, Human Molecular Genetics, EMBO Journal, FEBS

	Journal, Open Biology, The International Journal of Biochemistry and Cell Biology, Muscle and Nerve, Frontiers in Physiology, Cytoskeleton
2020	Cardiovascular Research, Physiological Reports, FASEB J., Theranostics, Proteomics, Journal of General Physiology
2021	International Journal of Biochemistry and Cell Biology, Journal of Clinical Medicine, Journal of General Physiology, Cells, EMBO Reports

Teaching Service

Medical Student Instruction

2007-2019 Cell and Molecular Biology (3 lecture hours, ~150 students, 4 total contact hours)
- Signal Transduction
- Introduction to Lipids
- Membrane and Membrane Proteins

2020-onwards Foundations of Disease (3 lecture hours, ~150 students, 3 total contact hours; 1 primer lecture)
- Signal Transduction
- Membrane and Membrane Proteins
- Introduction to Lipids (primer lecture)

Graduate Student Instruction

2005-present GPILS-715: Muscle Cell Biology and Development (2 lecture hours, ~15-20 students, 3 total contact hours)
- Sarcomeric Assembly
- Research Discussion

2007-2012 GPILS-713: Graduate Biochemistry Seminars: Molecular Basis of Cellular Functions (3 lecture hours, ~20 students, 5 total contact hours), **Course Director**
- Topics in Biochemistry and Modern Molecular Biology

2010-present GPILS-601: Mechanisms in Biomedical Sciences (1 lecture hour, ~40-50 students, 3 total contact hours)
- Membrane Proteins
- Review Session/Exam Preparation

2012-2019 GPILS-601: Mechanisms in Biomedical Sciences; **Course Sub-director**, Section: Organelles, Membrane Organization, Cytoskeleton and Motility.

2020-onwards GPILS-601: Mechanisms in Biomedical Sciences; **Course Sub-director**, Section: Cellular Architecture and Trafficking.

Mentoring

Assistant Professors (non-tenure track)

2013-2015 Maegen A. Ackermann, Ph.D.

Postdoctoral fellows

2007-2011 Solomon V. Yap, Ph.D./M.D.
2008-2012 Maegen A. Ackermann, Ph.D.
2008-2009 Marie Mameza, Ph.D.
2013-2017 Li-Yen R. Hu, Ph.D.
2015-2018 Li Wang, Ph.D.
2015-2018 Saravanakumar Marimuthu, Ph.D.
2018-present Panagiotis Tsakiroglou, Ph.D.
2020-present Alyssa Grogan, PhD

Graduate Students

2007-2013 Li-Yen R. Hu (Biochemistry)
2010-2014 Jason Koontz (Biochemistry)
2010-2014 Marey Shriver (Molecular Medicine)
2011-2014 Nicole Perry (Biochemistry)
2015-2019 Janelle Geist (Biochemistry)
2016-2020 Alyssa Grogan (Molecular Medicine)
2017-present Talia Guardia (MD/PhD Molecular Medicine)
2019-present Jennifer Mariano (Biochemistry)
2020 Aishwarya Iyer (MD/PhD Biochemistry)
2020 Matthew Eason (MD/PhD Molecular Medicine)

Graduate Rotation Students

2008 Jodian Brown (Biochemistry)
2009 Samusideen Adewale (Biochemistry)
2013 Tierra Jackson (Biochemistry)
2013 Nidhi Pamidimukkala (Molecular Medicine)
2013 Kshama Doshi (Toxicology)
2015 Blaine Dow (Molecular Medicine)
2015 Linda Senbanjo (Molecular Medicine)
2016 Patrick Bailey (Biochemistry)
2016 Nisha Pawar (Molecular Medicine)
2017 Winny Sun (Biochemistry)
2017 Christine Carney (Molecular Medicine)
2017 Ava Zapf (Molecular Medicine)
2018 Abanoub Gad (Molecular Medicine)
2019 Jennifer Mariano (Biochemistry)
2019 Aishwarya Iyer (MD/PhD Biochemistry)
2019 Matthew Eason (MD/PhD Molecular Medicine)
2021 Hardler Servius (PhD/Biochemistry)
2021 Rex Gonzales (PhD/Biochemistry)
2021 Daniela Fuller (PhD/Molecular Medicine)

Fulbright Scholars

2018-2019 Janis Stavusis

Research Technicians

2002-2006 Dawn Catino (Currently employed by MedImmune, Inc.)

2006-2007 Sara Hirsch (Graduated from Saint Louis University with an MD/PhD degree in 2015)
2009-2010 Nicole Perry (Currently post-doc in University of Washington)
2010-2012 Jane Valenti
2012-2013 Minerva Contreras (Currently employed by UMSOM, Dept. of Physiology)

Medical Students

2008 Elizabeth Le (Cell and Molecular Biology Honors Project)

Undergraduate Students

2009-2010 Juan Rivas (Towson University, MD)
2012-2013 Puja Patel (University of Maryland Baltimore County, MD)

Summer Undergraduate Students

2010 Jachary Cupler (Juniata College, PA)
2012 Puja Patel (University of Maryland Baltimore County, MD)
2014-2015 Brendan King (University of Virginia, VA); NSIP recipient
2015 Tessa Seale (University of Maryland Baltimore County, MD); NSIP recipient
2016 Julianna Boswell (University of Maryland College Park, MD): UM Scholar
2016 Sam Savidge (Washington University, MO) NSIP recipient
2017 Beita Badiei (University of Maryland College Park, MD); NSIP recipient
2018 Maanas Chiplunkar ((University of Maryland College Park, MD): UM Scholar
2018 Danielle Cassidy (University of Maryland Baltimore County, MD); NSIP recipient

Graduate Student Thesis Committee Service-University of Maryland, School of Medicine

2005-2007 Maegen A. Borzok (supervisor: Dr. R.J. Bloch, Physiology)
2006-2009 Benjamin Busby (supervisor: Dr. R.J. Bloch, Physiology)
2008-2010 Chris Willis (supervisor: Dr. R.J. Bloch, Physiology)
2010-2011 Jodian Brown (supervisor: Dr. A. Yang, Anatomy-Neurobiology)
2010-2012 Peter Hecker (supervisor: Dr. W. Stanley, Medicine)
2009-2013 Tova Schachter (supervisor: Dr. M. Schneider, Biochemistry & Molecular Biology)
2010-2013 Patrick Robinson (supervisor: Dr. M. Schneider, Biochemistry & Molecular Biology)
2010-2012 Tiffany Scharadin (supervisor: Dr. R. Eckert, Biochemistry & Molecular Biology
2011-2012 Jin Xu (supervisor: Dr. J. Du, Biochemistry & Molecular Biology)
2011-2013 Kelly O'Connel (supervisor: Dr. William Stanley, Medicine)
2011-2015 Kamalika Saha (supervisor: Dr. R. Eckert, Biochemistry & Molecular Biology)
2012-2017 Patrick Desmond (supervisor: Dr. R.J. Bloch; Physiology)
2015-2019 Amber Mueller (supervisor: Dr. R.J. Bloch, Physiology)
2016-2019 Nicole Snell (supervisor: Dr. M. Rizzo, Physiology)
2015-present Sarah Russell (supervisor: Dr. M. Schneider, Biochemistry & Molecular Biology)
2018-present Allison Mancini (supervisor: Dr. M. Rizzo, Physiology)
2018-present Katherine Coburn (supervisor: Dr. D. Weber; Biochemistry & Molecular Biology)
2019-present Annica Harriott (supervisor: Dr. C. Ward; Orthopedics)
2019-present Kaila Noland (supervisor: Dr. R. Bloch; Physiology)
2020-present Geraldine Ezeka (supervisor: Dr. R. Eckert; Biochemistry & Molecular Biology)
2020-present McKayla Mickle (supervisor: Dr. E. Eckert; Biochemistry & Molecular Biology)
2021-present Benjamin Grosso (supervisor: Dr. Roger Bannister; Biochemistry & Molecular Biology)
2021-present Mackenzy Mull (supervisor: Dr. Stuart Martin; Physiology)
2021-present Maria Trafficante (supervisor: Dr. Robert Bloch; Physiology)

2021-present Megan Delaney (supervisor: Dr. Zhe Han; Medicine)
2021-present Ming-Wen Chen (supervisors: Drs Myriam Gorospe, NIH & Dr. Gerald Wilson, UMSOM Biochemistry & Molecular Biology

Grant Support

Current

09/01/20-08/31/25 A. Kontrogianni-Konstantopoulos
"*Missense mutations in MYBPC1 co-segregating with a new form of myopathy*"
NIH/NIAMS-R01AR076373
Annual Direct Costs: $275,505
Total Direct Costs: $1,342,096

08/01/20-07/31/25 R. J. Bloch and A. Kontrogianni-Konstantopoulos (MPI)
"*Cytoskeletal Regulation of SERCA in Muscle*"
NIH/NIAMS-R01AR077106
Annual Direct Costs: $363,169
Total Direct Costs: $1,815,845

02/01/19-01/31/22 A. Kontrogianni-Konstantopoulos (PI, 10%)
"*Novel mutations in MYBPC1 resulting in myopathy with tremor*"
Muscular Dystrophy Association-Research Grant
Annual Direct Costs: $100,000
Total Direct Costs: $300,000

05/01/96-04/30/21 A. Kontrogianni-Konstantopoulos (Director as of 07/01/2019)
T32 AR007592-017 "*Interdisciplinary Training Program in Muscle Biology*"
Annual Costs: $169,950 (supports 5 pre- and 5 post-doctoral trainees per year)

Completed

05/01/15-04/30/21 K. Konstantopoulos & A. Kontrogianni-Konstantopoulos (Multi-PI, 30%)
"*Development of High Throughput Screening Technologies in Breast Cancer*"
NIH/NCI R01 CA183804
Annual Direct Costs (UMSOM): $173,000
Total Direct Costs (UMSOM): $865,000

09/01/18-08/31/20 A. Kontrogianni-Konstantopoulos (PI, 10%)
"*Regulation of MyBP-C slow via phosphorylation in skeletal muscles"*
NIH/NIAMS R21 AR072981
Annual Direct Costs: $132,000 (yr1); $110,000 (yr2)
Total Direct Costs: $242,000

07/01/16-06/30/18 A. Kontrogianni-Konstantopoulos, A. (PI, 10%)
"*Obscurins: new players in the development of hypertrophic cardiomyopathy"*
American Heart Association-Grant In Aid
Annual Direct Costs: $70,000
Total Direct Costs: $140,000

07/01/14-06/30/16 A. Kontrogianni-Konstantopoulos (PI, 10%)
"*Obscurin Signaling through its Ser/Thr Kinase Domain-2 in Cardiac Cells*"
American Heart Association-Grant In Aid
Annual Direct Costs: $70,000
Total Direct Costs: $140,000

07/01/14-03/31/14 A. Kontrogianni-Konstantopoulos (PI,10%)
"Development of a single Biomarker Prognostic Kit for Metastatic Breast Cancer"
MII Innovation Commercialization Program
Annual/Total Direct Costs: $100,000

04/01/06-02/28/13 A. Kontrogianni-Konstantopoulos (PI, 25%)
"M-line Proteins and A-band Assembly in Skeletal Muscle"
NIH / NIAMS R01 AR52768
Annual Direct Costs: $186,529
Total Direct Costs: $957,747

12/01/10-11/30/12 A. Kontrogianni-Konstantopoulos (PI 10%)
"HAX-1: a Multifaceted Family of Apoptotic Regulators"
NIH/NHLBI R21 HL106197
Annual Direct Costs: $150,000
Total Direct Costs: $275,000

07/01/10-06/30/12 A. Kontrogianni-Konstantopoulos (PI 10%)
"A Novel Form of Obscurin Localizes at the Intercalated Disk: Molecular and Functional Implications"
American Heart Association
Annual Direct Costs: $70,000
Total Direct Costs: $140,000

07/01/10-06/30/12 A. Kontrogianni-Konstantopoulos (PI 0%)
"Unraveling the Role of Obscure Obscurin in Cancer"
NIH / NCI-JHU / PSOC / Pilot Projects in Cancer Research
Annual Direct Costs: $25,000
Total Direct Costs: $50,000

01/01/07-12/31/09 A. Kontrogianni-Konstantopoulos (PI 15%)
"M-band Proteins and their Role in Thick Filament Assembly"
Muscular Dystrophy Association / Research Grant
Annual Direct Costs: $68,182
Total Direct Costs: $204,546

07/01/05-06/30/09 R.J. Bloch (Co-Investigator 10%)
"Obscurin and Small Ankyrin in Cardiac and Skeletal Muscle"
NIH / NIAMS R01 HL64304
Annual Direct Costs: $237,045
Total Direct Costs: $970,417

07/01/08 A. Kontrogianni-Konstantopoulos
"Hax-1: Molecular Mechanisms and Anti-apoptotic Capacity In Vivo"
NIH / NHLBI-Gene Therapy Resource Program

Type: Request Service Application (RSA); RSA for generation of adenoviruses and adeno-associated viruses for in vitro and in vivo overexpression and downregulation studies of proteins of interest

07/01/03-06/30/06 A.Kontrogianni-Konstantopoulos (PI 50%)
"Proteins Organizing the Sarcomere and the SR of Skeletal Muscle"
Muscular Dystrophy Association / Research Development Award

01/25/10-1/24/13 (Mentor) PI: M. Ackermann
"MyBP-C Slow Variant 1: a Slow Isoform in Fast Muscle."
NIH / NIAMS
Annual Direct Costs: $52,154
Total Direct Costs: $156,438

07/01/10-6/30/12 (Mentor) PI: S. Yap
"Development and Hematopoietic Differentiation of CCR5Δ32+/+ iPSC from Cord Blood Progenitors"
Maryland Stem Cell Fund Research
Annual Direct Costs: $55,000
Total Direct Costs: $110,000

Patents

1. Vafiadaki, E., Sanoudou, D., Arvanitis, D., Catino, D.H., Kranias, E.G., and **Kontrogianni-Konstantopoulos, A.** "Phospholamban interacts with HAX-1, a mitochondrial protein with anti-apoptotic function" (patent number 20060100211).
2. **Kontrogianni-Konstantopoulos, A,** Konstantopoulos, K., Shriver, M. and Perry, N.A. "Giant Obscurins and Uses Thereof in Cancer Prognosis and Therapy " (US Patent No. 8,739,784 i).
3. Konstantopoulos, K., Paul, C.D., Quinones-Hinojosa, A., **Kontrogianni-Konstantopoulos, A**. "Microfluidic Chip For Analysis Of Cell Motility And Methods For Using Same", U.S. Patent Application No.: 10,105,700.

Publications (#: corresponding author)

Peer-reviewed Journal Articles

1. **Kontrogianni-Konstantopoulos, A**., Vlahou A., Vu D., and Flytzanis C.N., "A novel sea urchin orphan receptor encoded by alternatively spliced maternal mRNAs", *Dev. Biol*. 177, 371-382, 1996.
2. **Kontrogianni-Konstantopoulos. A**., Leahy, P. S., and Flytzanis C.N., "Embryonic and post-embryonic utilization and subcellular localization of the nuclear receptor SpSHR2", *J. Cell Sci.* 111, 2159-2169, 1998.
3. **Kontrogianni-Konstantopoulos, A.**, Huang, S.-C., and Benz, E.J., Jr., "A non-erythroid isoform of protein 4.1R interacts with components of the contractile apparatus in skeletal myofibers", *Mol. Biol. Cell* 11, 3805-3817, 2000.
4. **Kontrogianni-Konstantopoulos, A**., Frye, C., Benz, E.J. Jr., and Hung, S.-C. "The Prototypical 4.1R-10 kDa Domain and the 4.1G-10 kDa Paralog Mediate Fodrin/Actin Complex Formation", *J. Biol. Chem*. 276, 20679-20687, 2001.
5. **Kontrogianni-Konstantopoulos, A.**, and Flytzanis, C.N., "Differential cellular compartmentalization of the nuclear receptor SpSHR2 splicing variants in early sea urchin

embryos", *Mol. Reprod. Dev.* 60, 147-157, 2001.
6. **Kontrogianni-Konstantopoulos, A.#**, and Bloch, R.J., "The Hydrophilic Domain of Small Ankyrin 1 Interacts with the Two NH2-terminal Immunoglobulin Domains of Titin", *J. Biol. Chem*. 278, 3985-3991, 2003.
7. **Kontrogianni-Konstantopoulos, A.#,** Jones, E., van Rossum, D., and Bloch, R.J., "Obscurin is a Ligand for Small Ankyrin 1 in Skeletal Muscle" *Mol. Biol. Cell* 14, 1138-1148, 2003.
8. Borisov, A.B., Raeker, M.O., **Kontrogianni-Konstantopoulos, A.,** Yang, K., Kurnit D.M., Bloch, R.J., and Russel, M.W., "Rapid Response of Cardiac Obscurin Gene Cluster to Aortic Stenosis: Differential Expression of Obscurin and Obscurin-MLCK and Involvement in Hypertrophic Growth", *Biochem. Biophys. Res. Commun*. 310, 910-918, 2003.
9. **Kontrogianni-Konstantopoulos, A.#,** Catino, D.H., Strong, J.C., Randall, W.R. and Bloch, R.J., "Obscurin regulates the organization of myosin into A-bands", *Am. J. Physiol. Cell Physiol.,* 287, C209-C217, 2004.
10. Borisov, A.B, **Kontrogianni-Konstantopoulos, A.,** Bloch, R.J., Westfall, M.V. and Russell, M.W., "Dynamics of obscurin localization during differentiation and remodeling of cardiac myocytes: Obscurin as an integrator of myofibrillar structure", *J. Histochem. Cytochem.* 52 (9), 1117-1127, 2004.
11. Sanoudou, D., Vafiadaki, E., Arvanitis, D., Kranias, E.G. and **Kontrogianni-Konstantopoulos, A.#**, "Array Lessons from the Heart: Focus on the Genome and Transcriptome of Cardiomyopathies", *Physiol. Genomics*, 21, 131-143, 2005.
12. Borisov, A.B., Sutter, S.B., **Kontrogianni-Konstantopoulos, A.,** Bloch, R.J., Westfall, M. V. and Russell, M.W., "Essential role of obscurin in cardiac myofibrillogenesis and hypertrophic response: evidence from small interfering RNA-mediated gene silencing" *Histochem. Cell Biol*., 1-12, 2005.
13. **Kontrogianni-Konstantopoulos, A.#,** Catino, D.H., Strong, J.C., and Bloch, R.J. "De Novo Myofibrillogenesis in C2C12 Cells: Evidence for the Independent Assembly of M-lines and Z-disks" *Am. J. Physiol. Cell Physiol.,* 290, 626-637, 2006.
14. **Kontrogianni-Konstantopoulos, A.#** and Bloch, R.J., "Obscurin: a multitasking muscle giant", *J. Muscle Res. Cell Motility*, 26, 419-426, 2006.
15. Raeker, M., Su, F., Sutter, S., **Kontrogianni-Konstantopoulos, A**., Borisov, A.B., Lyons, S.E., Russell, M.W., " Obscurin Is Required For the Lateral Alignment of Striated Myofibrils In Zebrafish", *Dev. Dynamics*, 235, 2018-2029, 2006.
16. **Kontrogianni-Konstantopoulos, A.#,** Catino, D.H., Strong, J.C., Sutter, S., Borisov, A.B., Pumplin, D.W., Russell, M.W., and Bloch, R.J. "Obscurin Modulates the Assembly and Organization of both the Myofibril and the Sarcoplasmic Reticulum" *FASEB J.*, 20, 2102-2111, 2006.
17. Vafiadaki, E., Sanoudou, D., Arvanitis, D., Catino, D.H., Kranias, E.G., and **Kontrogianni-Konstantopoulos, A.#**, "Phospholamban interacts with HAX-1, a mitochondrial protein with anti-apoptotic function". *J. Mol. Biol.*, 367, 65-79, 2007.
18. Bowman, A.L., **Kontrogianni-Konstantopoulos, A.**, Hirsch, H., Geisler, S., Gonzalez-Serratos, H., Russell, M.W. and Bloch, R.J., "Different obscurin isoforms localize to distinct sites at sarcomeres". *FEBS Letters*, 581, 1549-54, 2007.
19. Arvanitis, D.A., Vafiadaki, E., Mitton, B.A., Gregory, K.N., **Kontrogianni-Konstantopoulos, A.,** Sanoudou, D., and Kranias E.G., "Histidine-rich calcium binding protein is a novel binding partner of SERCA2a in the heart". *Am. J. Physiol.-Cell Physiol.* 293(3): H1581-9, 2007.
20. Borzok, M.A., Catino, D.H., Nicholson, J., **Kontrogianni-Konstantopoulos, A.**, and Bloch, R.J., "Mapping the Binding Site on Small Ankyrin 1 for Obscurin", *J. Biol. Chem.* 282(44), 32384-96, 2007.
21. Bowman, L.A., Catino, D.H., Strong, J., Randall, W.R., **Kontrogianni-Konstantopoulos, A**., and Bloch, R.J. The Rho-GEF domain of obscurin regulates assembly of titin at the Z-disk

through interactions with RanBP9", *Mol. Biol. Cell,* 19(9), 3782-92, 2008.
22. Arvanitis, D., Sanoudou, D., Kolocathis, F., Vafiadaki, E., Papalouka, V., **Kontrogianni-Konstantopoulos, A.**, Theodorakis, G., Paraskevaidis, I., Adamopoulos, S., Dorn, G., Kremastinos, D., Kranias, E.G., "Ser96Ala Variant in Histidine-Rich Calcium Binding Protein Is Associated With Life-Threatening Ventricular Arrhythmias in Nonischemic Dilated Cardiomyopathy", *European Heart Journal*, 29 (20), 2514-2525, 2008.
23. Vafiadaki, E., Arvanitis, D.A., Pagakis, S. N, Papalouka, V., Sanoudou, D., **Kontrogianni-Konstantopoulos, A.**[#] and Kranias, E.G., "The anti-apoptotic protein HAX-1 interacts with SERCA2 and regulates its protein levels to promote cell survival", *Mol. Biol. Cell,* 20 (1), 306-318, 2009.
24. Ackermann, M.A., Hu, L.-Y. R., Bowman, A.L., Bloch, R.J. and **Kontrogianni-Konstantopoulos, A**.[#], "Obscurin Interacts with a Novel Isoform of Myosin Binding Protein C-Slow at the Periphery of the M-band and Regulates the Assembly of Thick Filaments", *Mol. Biol. Cell*, 201 (12): 2963-78, 2009.
25. **Kontrogianni-Konstantopoulos, A.**[#]**,** Ackermann, M.A, Bowman, A.L., Yap, S.V. and Bloch, R.J., "Muscle giants: Molecular templates in sarcomerogenesis", *Physiol. Reviews*, 89 (4), 1217-1267, 2009.
26. Zhao, W., Waggoner, J.R., Zhang, Z.G., Lam, C.K., Han, P, Qian, J, Schroder, P.M., Mitton, B., **Kontrogianni-Konstantopoulos, A.,** Robia, S.L. and Kranias, E.G., "The anti-apoptotic protein HAX-1 is a regulator of cardiac function", *Proc. Natl. Acad. Sci*. USA, 106(49), 20776-81, 2009.
27. Yap, S.V., Vafiadaki E., Strong, J., **Kontrogianni-Konstantopoulos, A.**[#]**,** "HAX-1: A multifaceted antiapoptotic protein localizing in the mitochondria and the sarcoplasmic reticulum of striated muscle cells", *J. Mol. Cell Cardiol.*, 48(6), 1266-1279, 2010.
28. Zhu, F., Wang, P., **Kontrogianni-Konstantopoulos, A**., Konstantopoulos, K., "Prostaglandin (PG)D2 and 15-deoxy-Δ12,14-PGJ2, but not PGE2, Mediate Shear-Induced Chondrocyte Apoptosis via Protein Kinase A-dependent Regulation of Polo-like Kinases", *Cell Death Differ.*, 17(8), 1325-1334, 2010.
29. Ackermann, M.A. and **Kontrogianni-Konstantopoulos, A.**[#], "Myosin Binding Protein-C Slow: An Intricate Subfamily of Proteins", *J. Biomed. Biotechnol.*, 652065, 2010.
30. **Kontrogianni-Konstantopoulos, A.**[#]**,** Benian, G. and Granzier, H., "Advances in Muscle Physiology and Pathophysiology", *J. Biomed. Biotechnol.*, 780417, 2010.
31. Busby, B., Willis, C.D., Ackermann, M.A., **Kontrogianni-Konstantopoulos, A.**, Bloch, R.J., "Characterization and comparison of two binding sites on obscurin for small ankyrin 1", *Biochemistry*, 49(46), 9948-9956, 2011.
32. Yap, S.V., Koontz, J.M., and **Kontrogianni-Konstantopoulos, A.**[#]**,** "HAX-1: A family of apoptotic regulators in health and disease", *J. Cell Physiol.,* 22638, 2011.
33. Busby, B., Oashi, T., Willis, C.D., Ackermann, M.A., **Kontrogianni-Konstantopoulos, A.,** Mackerell, A.D. Jr, and Bloch R.J., "Electrostatic Interactions Mediate Binding of Obscurin to Small Ankyrin 1: Biochemical and Molecular Modeling Studies", *J. Mol. Biol.*, 408(2): 321-334, 2011.
34. **Kontrogianni_Konstantopoulos, A.**[#]**,** "Resisting resistin; it's good for the heart", *J. Mol Cell Cardiol,* 51(2), 141-143, 2011.
35. Ackermann, M.A., Ziman, A.P., Strong, J., Zhang, Y., Hartford, A.K., Ward, C.W., Randall, W., **Kontrogianni-Konstantopoulos, A**. and Bloch, R.J., "Integrity of the network sarcoplasmic reticulum in skeletal muscle requires small ankyrin 1", *J. Cell Sci.,* 124(Pt 21), 3619-3630, 2011.
36. Ackermann, M.A. and **Kontrogianni-Konstantopoulos, A.**[#], Myosin Binding Protein-C: a regulator of actomyosin interaction in striated muscle", *J. Biomed. Biotechnol*., 636403, 2011.
37. Ackermann, M.A. and **Kontrogianni-Konstantopoulos, A.**[#], "Myosin Binding Protein C Slow is a Novel Substrate for Protein Kinase A (PKA) and C (PKC) in Skeletal Muscle", *J.*

Proteome Res., 10(10), 4547-4555, 2011.
38. Perry, N.A., Shriver, M., Mameza, M.G., Grabias, B., Balzer, E., and **Kontrogianni-Konstantopoulos, A.#**, "Obscurins: Giant Proteins with Tumor Suppressing Activities in Breast Cancer*", FASEB Journal*, 26(7), 2764-75, 2012.
39. **Kontrogianni-Konstantopoulos, A.#,** Benian, G. and Granzier, H. "Advances in Muscle Physiology and Pathophysiology 2011" *J Biomed Biotechnol*., 930836, 2012.
40. Hu, L.Y. and **Kontrogianni-Konstantopoulos, A.#**, "The kinase domains of obscurin interact with intercellular adhesion proteins" *FASEB Journal,* 27(5), 2001-2012, 2013.
41. Perry, N.A., Ackermann, M.A., Shriver, M., Hu, L.Y., and **Kontrogianni-Konstantopoulos A.#**, "Obscurins: Unassuming giants enter the spotlight", *IUBMB Life*, 65(6):479-486, 2013.
42. Ackermann, M.A., Patel, P., Valenti, J., Tagaki, Y., Homsher, E., Sellers, J., and **Kontrogianni-Konstantopoulos A.#**, "Loss of Actomyosin Regulation in Distal Arthrogryposis Myopathy due to Mutant Myosin Binding Protein-C Slow", *FASEB Journal,* 27(8), 3217-3228, 2013.
43. Ackermann, M.A., and **Kontrogianni-Konstantopoulos A.#**, "Myosin binding protein-C slow: a multifaceted family of proteins with a complex expression profile in fast and slow twitch skeletal muscles", *Front .Physiol.,* 4:391, doi: 10.3389/fphys.2013.00391, 2013.
44. Koontz J., and **Kontrogianni-Konstantopoulos A.#, "**Competition through dimerization between antiapoptotic and proapoptotic HS-1-associated protein X-1 (Hax-1)", *J Biol Chem*., 289(6), 3468-77, 2014.
45. Ackermann, M.A., Shriver, M., Perry, N.A., Hu, L.Y., and **Kontrogianni-Konstantopoulos A.#,** "Obscurins: Goliaths and Davids take over non-muscle tissues", *PLos One,* 9(2):e88162, 2014.
46. Perry, N.A., Vitolo, M.I., Mastin, S.S., and **Kontrogianni-Konstantopoulos, A.#** "Loss of the obscurin-RhoGEF downregulates RhoA signaling and increases microtentacle formation and attachment of breast epithelial cells" *Oncotarget*, 5(18), 8558-68; 2014.
47. Shriver, M., Stroka, K.M., Vitolo, M.I., Martin, S.S., Huso, D.L., Konstantopoulos, K., and **Kontrogianni-Konstantopoulos A.#** "Loss of giant obscurins from breast epithelium promotes epithelial-to-mesenchymal transition, tumorigenicity and metastasis" *Oncogene*, 2014, doi: 10.1038/onc.2014.358.
48. Wang, P., Chen, S-H, Hung, w-C, Paul, C., Zhu, F., Guan, P-P., Huso, D.L., **Kontrogianni-Konstantopoulos, A.,** and Konstantopoulos, K., "Fluid Shear Promotes Chondrosarcoma Cell Invasion by Activating Matrix Metalloproteinase-12 via IGF-2 and VEGF-Signaling Pathways", *Oncogene*, 2014, doi: 10.1038/onc.2014.397.
49. Hu, L.Y., Ackermann, M.A., and **Kontrogianni-Konstantopoulos, A.#,** "The Sarcomeric M-Region: Molecular Command Center for Diverse Cellular Processes", BioMed Research International, 2015, 2015:714197.
50. Ackermann M.A., Kerr, J., King, B., Ward, C., and **Kontrogianni-Konstantopoulos, A.#,** "The Phosphorylation Profile of Myosin Binding Protein-C Slow is Dynamically Regulated in Slow-Twitch Muscles in Health and Disease", *Scientific Reports*, 2015, doi: 10.1038/srep12637.
51. Ackermann, M.A., Ward, C., Gurnett, C., and **Kontrogianni-Konstantopoulos, A.#**, "Myosin Binding Protein-C Slow Phosphorylation is Altered in Duchenne Dystrophy and Arthrogryposis Myopathy in Fast-Twitch Skeletal Muscles", *Scientific Reports*, 2015, doi: 10.1038/srep13235.
52. Shriver, M. Marimuthu, S., Paul, C., Geist, J., Seale, T., Konstantopoulos, K., and **Kontrogianni-Konstantopoulos, A#.** "Giant obscurins regulate the PI3K cascade in breast epithelial cells via direct binding to the PI3K/p85 regulatory subunit", *Oncotarget*, 2016, doi: 10.18632/oncotarget.9985.
53. Stroka, K.M., Wong, B.S., Shriver, M., Phillip, J.M., Wirtz, D., **Kontrogianni-Konstantopoulos, A**., and Konstantopoulos, K., "Loss of giant obscurins alters breast epithelial cell mechanosensing of matrix stiffness", *Oncotarget*, 2016, doi: 10.18632/oncotarget.10997.

54. Geist, J. and **Kontrogianni-Konstantopoulos, A.#**, "MYBPC1, an Emerging Myopathic Gene: What we Know, What we Need to Learn", *Front Physiol*, 2016, doi: 10.3389/fphys.2016.00410.
55. Hu, L.-Y. R., Ackermann, M.A., Hecker, P.A., Prosser, B.L., King, B., O'Connell, K., Grogan, A., Meyer, L.C., Berndsen, C.E., Wright, N.T., Lederer, W.J., and **Kontrogianni-Konstantopoulos, A.#**. "Deregulated Ca^{2+} cycling underlies the development of arrhythmia and heart disease due to mutant obscurin", *Science Advances*, 2017, 3(6):e1603081. doi: 10.1126/sciadv.1603081.
56. Ackermann, M.A., King, B., Lieberman, N.A.P., Bobbili, P.J., Rudloff, M., Berndsen, C.E., Wright, N.T., Hecker, P.A., and **Kontrogianni-Konstantopoulos A#**. "Novel obscurins mediate cardiomyocyte adhesion and size via the PI3K/AKT/mTOR signaling pathway", *J Mol Cell Cardiol*, 2017, 111:27-39, doi: 10.1016/j.yjmcc.
57. Wang, L., Geist, J., Grogan, A., Hu, L-Y., R. and **Kontrogianni-Konstantopoulos, A.#,** "Thick filament protein network, functions and disease association", *Comprehensive Physiol*. 2018, 13;8(2):631-709, doi: 10.1002/cphy.c170023.
58. Geist, J., Ward, C.W., and **Kontrogianni-Konstantopoulos, A.#,** "Structure before function: myosin binding protein-C slow is a structural protein with regulatory properties", *FASEB Journal*, 2018, doi: 10.1096/fj.201800624R.
59. Grogan, A., and **Kontrogianni-Konstantopoulos, A.#, "**Unraveling obscurins in heart disease**",** *Pflugers Archives*, 2018, doi: 10.1007/s00424-018-2191-3.
60. Robinett, J.C., Hanft, L.M., Geist, J., **Kontrogianni-Konstantopoulos, A**., and McDonald, K.S., "Regulation of myofilament force and loaded shortening by Skeletal Myosin Binding Protein-C", *J Gen Physiol*. 2019 Jan 31. pii: jgp.201812200. doi: 10.1085/jgp.201812200.
61. Yankasas, C.L., Thompson, K.N., Paul, C.D., Vitolo, M.I., Mistriotis, P., Mahendra, A., Shea, D.J., Manto, K.M., Chai, A., Varadarajan, N., **Kontrogianni-Konstantopoulos, A**., Martin, S.S., and Konstantopoulos, K., "Development of a microfluidic invasion network device (MIND) for diagnosis and precision care in breast cancer", *Nat Biomed Eng*, 2019, 3(6):452-465. doi: 10.1038/s41551-019-0400-9.
62. Stavusis, J., Lace, B., Schafer, J., Geist, J., Inashkina, I., Kidere, D., Pajusalu, S., Wright, N.T., Saak, A., Weinhold, M., Haubenberger, D., Jackson, S., **Kontrogianni-Konstantopoulos, A#.,** and Bonnemann, C.G. "Novel mutations in MYBPC1 are associated with myogenic tremor and mild myopathy, *Ann Neurol,* 2019, 86(1):129-142. doi: 10.1002/ana.25494.
63. Shashi, V., Geist, J., Lee, Y., Yoo, Y., Shin, Y.B., Schoch, K., Sullivan, J., Stong, N., Smith, E., Jasien, J., Kranz, P., Lee, Y., Wright, N.T., Choi, M., and **Kontrogianni-Konstantopoulos, A.#**, "Heterozygous variants of MYBPC1 are associated with an expanded neuromuscular phenotype beyond arthrogryposis", *Hum Mut*, 2019, 40(8):1115-1126. doi: 10.1002/humu.23760.
64. Stavusis J, Geist J., and **Kontrogianni-Konstantopoulos, A.#**, "Sarcomeric myopathies associated with tremor: new insights and prospectives" *Journal of Muscle Research and Cell Motility*, 2019, doi: 10.1007/s10974-019-09559-1.
65. Hu, L-Y R and **Kontrogianni-Konstantopoulos, A.#**, "Proteomic analysis of myocardia containing the obscurin R4344Q mutation linked to hypertrophic cardiomyopathy", *Frontiers in Physiology*, 2020; doi: 10.3389/fphys.2020.00478.
66. Grogan, A, Tsakiroglou, P and **Kontrogianni-Konstantopoulos, A.#**, "Double the trouble: giant proteins with dual kinase activity in the heart". *Biophysical Reviews*, 2020, doi: 10.1007/s12551-020-00715-3.
67 Grogan, A, Coleman, A, Joca, H, Granzier, H, Russel, M, Ward, C, and **Kontrogianni-Konstantopoulos, A.#** "Deletion of obscurin immunoglobulin domains Ig58/59 leads to age-dependent cardiac remodeling and arrhythmia", *Basic Research in Cardiology*, 2020, 15(6):60, doi: 10.1007/s00395-020-00818-8.
68. Geist, J, Stavusis, J, Joca, H, Robinett, J, Hanft, L, Vandermeulen, J, Zhao, R, Stains, J, Konstantopoulos, K, McDonald K, Ward C, and **Kontrogianni-Konstantopoulos, A.#**

"Sarcomeric deficits underlie *MYBPC1*-associated myopathy with myogenic tremor", Under Review in *JCI Insight*.

69. Guardia, T, Eason, M. and **Kontrogianni-Konstantopoulos, A.#** "Obsurin: a multitasking giant in the fight against cancer", *Biochimica et Biophysica Acta-Reviews in Cancer,* In Press
70. Wang, L., Tsakiroglou, P., Yankasas, C., Low, R., Li, A., dos Remedios, C., Konstantopoulos, K., Wright, N., and **Kontrogianni-Konstantopoulos, A.#** "Essential role of obscurin kinase-1 in cardiomyocytes coupling via N-cadherin phosphorylation", In preparation.
71. Shea, D.J., Wong, B.S., Tuntithavornwat, S., Guardia, T., Yankasas, C.L., Zheng, L., **Kontrogianni-Konstantopoulos, A.#** and Konstantopoulos, K. "Giant obscurin is a novel tumor suppressor in pancreatic cancer regulating cytoskeletal dynamics". In preparation.

Book Chapters

1. Ackermann, M.A., Hu, L.-Y. R., **Kontrogianni-Konstantopoulos, A.** (2011) "Intracellular Connections in the Heart: The Intercalated Disc" in "Cardiomyopathies-From Basic Research to Clinical Management", InTech, Open Access Publisher, Rijeka, Croatia.
2. Ackermann, M.A., **Kontrogianni-Konstantopoulos, A.** (2012) "Cardiomyopathies: When the Goliaths of Heart Muscle Hurt" in "Cardiomyopathy", InTech, Open Access Publisher, Rijeka.

Published Abstracts

1. **Kontrogianni-Konstantopoulos, A**., Huang, S-C, and Benz, E.J., Jr., "Expression of an alternatively spliced, muscle-specific exon in protein 4.1R", *Blood* (Supplement 1, abstract #: 1217), 1998.
2. **Kontrogianni-Konstantopoulos, A**., Huang, S.-C., and Benz, E.J., Jr., "The cytoskeletal protein 4.1R associates with major components of the sarcomere in skeletal muscle", *Blood* (Supplement 1, abstract #: 853), 1999.
3. **Kontrogianni-Konstantopoulos, A**., Huang, S.-C., and Benz, E.J., Jr., "A non-erythroid 4.1R protein interacts with major components of the contractile apparatus", *Mol. Biol. Cell* (Volume 10, Supplement, abstract #: 778), 1999.
4. **Kontrogianni-Konstantopoulos, A**., Huang, S.-C., and Benz, E.J., Jr., "Identification of the minimal domain of protein 4.1R involved in the formation of fodrin-actin complexes in adult rat brain", *Blood* (Supplement 1, abstract #: 1898), 2000.
5. **Kontrogianni-Konstantopoulos, A**., Huang, S.-C., and Benz, E.J., Jr., "Characterization of the complex 4.1 gene family in adult skeletal muscle", *Mol. Biol. Cell (*Volume 11, Supplement, abstract #: 389), 2000.
6. **Kontrogianni-Konstantopoulos, A.,** and Bloch, R.J., " The hydrophilic domain of small Ankyrin 1 interacts with the two NH_2-terminal Immunoglobulin domains of Titin ", *Mol. Biol. Cell* (Volume 12, Supplement, abstract #: 2476), 2001.
7. **Kontrogianni-Konstantopoulos, A.,** Jones, E., van Rossum, D., and Bloch, R.J., "Obscurin is a Ligand for Small Ankyrin 1 in Skeletal Muscle", *Mol. Biol. Cell* (Volume 13, Supplement, abstract #: 2819), 2002.
8. **Kontrogianni-Konstantopoulos, A.,** Catino, D.H., Bowie, A. and Bloch, R.J., " The Giant Sarcomeric Protein, Obscurin, is Involved in the Assembly of the A-band", *Mol. Biol. Cell* (Volume 14, Supplement, abstract #: B194), 2003.
9. **Kontrogianni-Konstantopoulos, A.,** Catino, D.H., and Bloch, R.J., " Spatiotemporal Relationship of Obscurin to Thick Filaments, and to Proteins of the M-Line and Z-Disk during Myofibrillogenesis in C2C12 cells", *Mol. Biol. Cell* (Volume 15, Supplement, abstract #: B117), 2004.
10. Bowman, A.L., Lu, G., Catino, D.H., **Kontrogianni-Konstantopoulos, A.,** and Bloch, R.J., "Obscurin Signaling through its Rho-GEF/PH Domains", *Mol. Biol. Cell* (Volume 15,

Supplement, abstract #: B122), 2004.

11. **Kontrogianni-Konstantopoulos, A.,** Catino, D.H., Strong, J.C., Sutter, S.B., Pumplin, D.W., Russell, M.W., and Bloch, R.J., "Obscurin Modulates the Organization of Sarcomeres and the Sarcoplasmic Reticulum" *Mol. Biol. Cell* (Volume 16, Supplement, abstract #: 2370), 2005.
12. Bowman, A.L., **Kontrogianni-Konstantopoulos, A.**, Catino, D.H., Gonzalez-Serratos, H., and Bloch, R.J., "Localization of obscurin in skeletal muscle fibers", *Mol. Biol. Cell* (Volume 16, Supplement, abstract #: 2371), 2005.
13. Ackermann, M.A., **Kontrogianni-Konstantopoulos, A.,** and Bloch, R.J., "Characterization of the binding site of small ankyrin 1, a protein of the sarcoplasmic reticulum, for obscurin, a protein that surrounds sarcomeres in striated muscle" *Mol. Biol. Cell* (Volume 16, Supplement, abstract #: 2612), 2005.
14. Raeker, M.O., **Kontrogianni-Konstantopoulos, A.,** Sutter, S.B., Borisov, A.B., Bloch, R.J., Lyons, L.E., and Russell, M.W., "Obscurin depletion destabilizes the M band and inhibits sarcomeric myosin incorporation in developing zebrafish embryos", *Mol. Biol. Cell* (Volume 16, Supplement, abstract #: 2613), 2005.
15. Borzok, M.A., Catino, D., Nicholson, J., **Kontrogianni-Konstantopoulos, A.,** and Bloch, R.J., "Mapping the binding site on small ankyrin 1 for obscurin" *Mol. Biol. Cell* (Volume 17, Supplement, abstract #: 2269), 2006.
16. Bowman, A.L., **Kontrogianni-Konstantopoulos, A.,** O'Neill, A., and Bloch, R.J., "Obscurin interacts with filamin C and is present at costameres" *Mol. Biol. Cell* (Volume 17, Supplement, abstract #: 2270), 2006.
17. Busby, B., Borzok, M.A., **Kontrogianni-Konstantopoulos, A.,** and Bloch, R.J., "Characterization of the binding site on obscurin for small ankyrin 1" *Mol. Biol. Cell* (Volume 17, Supplement, abstract #: 2271), 2006.
18. Borzok, M.A., **Kontrogianni-Konstantopoulos, A**., Randall, W., and Bloch, R.J., "Small ankyrin organizes the network compartment of the sarcoplasmic reticulum around the contractile apparatus of striated muscle" *Mol. Biol. Cell* (Volume 18, Supplement, abstract #: 1004), 2007.
19. Hu, L.-Y. R., Valenti, J., and **Kontrogianni-Konstantopoulos, A**., "Localization of obscurin kinases in the extracellular matrix of striated muscle cells", *Mol. Biol. Cell* (Volume 21, Supplement, abstract #: 988383), 2010.
20. Hu, L.-Y. R., Valenti, J., and **Kontrogianni-Konstantopoulos, A**., "Localization and binding partners of obscurin kinases in striated muscle cells", *Mol. Biol. Cell* (Volume 22, Supplement, abstract #: 1882), 2011.
21. Hu, L.-Y. R., and **Kontrogianni-Konstantopoulos, A**., "The kinase domains of obscurin interact with intercellular adhesion proteins", *Mol. Biol. Cell* (Volume 23, Supplement, abstract #: 2948), 2012.
22. Hu, L-Y. R., Ackermann, M.A., Hecker, P.A., Prosser, B.L., Wright, N.T., O'Connell, K.A., Lederer, W.J. and **Kontrogianni-Konstantopoulos, A**, "Obscurin: a new player in cardiac hypertrophy", *Mol Biol Cell* (Volume 26, Supplement, abstract #: P2197), 2015.
23. Wang, Li, Hu, L.Y. R., Yankasas, C., Law, R., Konstantopoulos, K. and **Kontrogianni-Konstantopoulos, A**., "Essential role of obscurin kinase domain-1 in cardiac cell adhesion and communication by regulating the phosphorylation of N-cadherin", *Mol Biol Cell* (Volume 27, Supplement, abstract #: P3409), 2017.

Major Invited Presentations

1. "Characterization of Proteins Involved in the Organization of the Sarcomere and the Sarcoplasmic Reticulum in Striated Myofibers"; Biomedical Research Foundation of the Academy of Athens, Division of Basic Research, Athens, Greece. *(Invited by Dr. Michael*

Foundoulakis), June 18th, 2004.

2. "Obscurin: a Multitasking Muscle Giant"; International Symposium on Muscle Elastic Proteins: The Koscak Maruyama Memorial Meeting, Chiba University, Chiba, Japan. *(Invited by Dr. Sumiko Kimura)*, Nov. 20th, 2004
3. "Muscle Giants: Molecular Templates in Sarcomerogenesis"; University of South Carolina, Columbia, SC. *(Invited by Dr. Thomas Berg)*, May 18th, 2005.
4. "Unraveling the Obscure Obscurin"; University of Maryland, Baltimore, Dept. of Physiology, Seminar Series, Baltimore, MD. *(Invited by Dr. Robert J. Bloch)*, Sept. 15th, 2005.
5. "Unraveling the Obscure Obscurin: a Novel Muscle Giant that Plays a Pivotal Role in the Organization of the Contractile Sarcomere and the Sarcoplasmic Reticulum Membranes in Striated Muscle" Beth Israel Deaconess Medical Center, Harvard Medical School, Cardiovascular Division, Boston, MA. *(Invited by Dr. Anthony Rosenzweig)*, Sept. 20th, 2006
6. "Unraveling the Obscure Obscurin: a Novel Muscle Giant that Plays a Pivotal Role in the Organization of the Contractile Sarcomere and the Sarcoplasmic Reticulum Membranes in Striated Muscle" Loyola University Chicago, Stritch School of Medicine, Maywood, IL. *(Invited by Dr. Donald Bers)*, Jan. 17th, 2007.
7. "Unraveling the Obscure Obscurin: a Novel Muscle Giant that Plays a Pivotal Role in the Organization of the Contractile Sarcomere and the Sarcoplasmic Reticulum Membranes in Striated Muscle" SUNY Upstate Medical University, Syracuse, NY. *(Invited by Dr. Joseph Sanger)*, Feb. 8th, 2007.
8. "Unraveling the Obscure Obscurin: a Novel Muscle Giant that Plays a Pivotal Role in the Organization of the Contractile Sarcomere and the Sarcoplasmic Reticulum Membranes in Striated Muscle" Boston University, Boston, MA. *(Invited by Dr. Gary Skrinar)*, Feb. 12th, 2007.
9. "Unraveling the Obscure Obscurin: a Novel Muscle Giant that Plays a Pivotal Role in the Organization of the Contractile Sarcomere and the Sarcoplasmic Reticulum Membranes in Striated Muscle" Purdue University, West Lafayette, IN. *(Invited by Dr. Alan Grant)*, Feb. 20th, 2007.
10. "Unraveling the Obscure Obscurin: a Novel Muscle Giant that Plays a Pivotal Role in the Organization of the Contractile Sarcomere and the Sarcoplasmic Reticulum Membranes in Striated Muscle" University of California, Davis, CA *(Invited by Dr. Sue Bodine)*, Mar. 21st, 2007.
11. "Unraveling the Obscure Obscurin: a Novel Muscle Giant that Plays a Pivotal Role in the Organization of the Contractile Sarcomere and the Sarcoplasmic Reticulum Membranes in Striated Muscle" University of Maryland, Baltimore, MA *(Invited by Dr. Richard Eckert*), Mar. 28th, 2007.
12. "Obscurin: a muscle giant that regulates sarcomere and membrane assembly", American Society for Cell Biology, 48th annual meeting, Special Interest Group: Muscle Cytoskeletal Protein Assembly in Normal and Diseased Muscles, San Francisco, CA (*Invited by Drs. Sanger and Gregorio*), Dec. 13th, 2008.
13. "HAX-1: a multifaceted protein with emerging roles in Ca cycling, apoptosis and cardiac function", International Society for Heart Research, Baltimore, MD (*Invited by Dr. Meredith Bond*), May 28th, 2009.
14. "HAX-1: a Novel Regulator of Apoptosis and Ca^{2+}-cycling in Striated Muscles", Biochemistry and Molecular Biology Departmental Seminar Series, UMAB, Baltimore, MD, Nov. 23rd, 2009.
15. "Thick filament assembly in muscle cells: a complex process guided by obscure proteins", Department of Cell Biology and Anatomy, University of Arizona, AZ (*Invited by Dr. Gregorio*), May 6th, 2010.
16. "Obscurins: the cell cannot have enough of them", Karolinska Institute, Stockholm, Sweden (FP7-funded network on *Mu*scle *Z*-d*i*sk Protein *C*omplexes: from atomic structure to physiological function; MUZIC), June 17th, 2010.

17. "Thick filament assembly in muscle cells: a complex process guided by obscure proteins", Department of Biology, Juniata College, PA (*Invited by Dr. Boyle*), Nov. 8th, 2010.
18. "Unraveling the roles of obscure obscurins in cancer", Johns Hopkins University, Physical Sciences-Oncology Center, National Institutes of Health-NCI, Nov 19th, 2010.
19. "Obscurins: a complex family of cytoskeletal regulators in striated muscles", Center for Vascular and Inflammatory Disease, The Center for Vascular and Inflammatory Diseases, University of Maryland, Baltimore, MD (*Invited by Dr. Netzel-Arnett*), April 27th, 2011.
20. "Elucidation of the Roles of Giant Obscurins in Breast Cancer Development and Progression", Johns Hopkins University, Physical Sciences-Oncology Center, National Institutes of Health-NCI, Sept. 12th, 2011.
21. "Novel Insights in the regulation of actomyosin contraction in healthy and diseased muscle", FASEB-Experimental Biology Meeting, San Diego, CA, April 23rd, 2012.
22. "Obscurins: giant regulators of muscle structure and function", Madison Myofilament Meeting: Elastic Proteins of the Sarcomere, (*Invited by Drs Richard L. Moss, Pieter de Tombe and R. John Solaro*), June 3rd, 2012.
23. "Actomyosin contractility in skeletal muscle cells: a dynamic process guided by complex proteins", UMSOM Biomet Annual Retreat, (*Invited by Dr. WJ Lederer*), April 3rd, 2012.
24. "Obscurins Unraveled: Signaling through their kinase domains", UMSOM, Retreat in Cardiovascular and Muscle Biology, Baltimore, MD, December 4th, 2012.
25. "Giant Obscurins in Breast Cancer Development and Progression", UMSOM, Biochemistry and Molecular Biology Retreat, Baltimore, MD, January 11th, 2013.
26. "Obscurin: a New Player in Cardiac Hypertrophy", Biophysical Society, Philadelphia, PA, February 4th, 2013.
27. "The cross-talk of two giants: what happens when obscurin fails to bind titin", International Society for Heart Research World Congress XXI, "Unifying, Invigorating and Translating Cardiovascular Research", San Diego, CA, (*Invited by Dr. Richard Moss*), July 1st, 2013.
28. "Structure and Function of Skeletal MyBP-C Isoforms", Moderator, Myosin Binding Protein-C: Past, Present and Future, Maywood, IL (*Invited by Dr. Sacthivel Sadayappan*), June 6th, 2014.
29. "MyBP-slow Phosphorylation in Health and Disease", Myofilament Meeting: Modifiers and Modulators of Myofilament Function, Madison, WI (*Invited by Drs Richard L. Moss, Pieter de Tombe and R. John Solaro*), June 9th, 2014.
30. "Giant Obscurins: Novel Tumor and Metastasis Suppressors in Breast Cancer", 20th World Congress on Advances in Oncology and 18th International Symposium of Molecular Medicine, Athens, Greece, October 9th, 2015.
31. "Giant Obscurins: Novel Tumor and Metastasis Suppressors in Breast Cancer" 1st International Cancer Study and Therapy Conference, Baltimore, MD, April 4th, 2016.
32. "Obscurins: cytoskeletal modulators of striated muscles and breast epithelium", University of Miami Miller School of Medicine, Miami, Florida (*Invited by Dr. Danuta Szczesna-Cordary*), January 10th, 2017.
33. "Giant obscurins act upstream of the PI3K/Akt pathway in breast epithelial cells" 2nd International Cancer Study and Therapy Conference, Baltimore, MD, February 20th, 2017.
34. "Giant obscurins: a family of tumor and metastasis suppressors that regulates the PI3K/Akt pathway in breast epithelial cells", 10th Annual World Cancer Congress, May 19th, 2017, Barcelona, Spain.
35. "Myosin Binding Protein-C slow in health and disease" Plenary talk, Myofilament Meeting, May 21st, 2018, Madison, WI.
36. "Expression of truncated obscurins leads to maladaptive responses in the heart", 47th European Muscle Conference, Sept. 3rd, 2018, Budapest, Hungary.
37. "Giant obscurins: novel tumor and metastasis suppressors in breast epithlelial cells" Johns Hopkins University, Institute for NanoBioTechnology, Women in Cancer Research Seminar

Series, Oct 29th, 2019.
38. "Cytoskeletal regulators in health and disease", Georgia Institute of Technology, School of Biological Sciences seminar series, Nov. 14th, 2019.
39. "Cytoskeletal regulators in health and muscle disease", University of Cincinnati Heart, Lung and Vascular Institute seminar series, Jan 13th, 2020.
40. "Obscurins: giant cytoskeletal regulators in heart disease", Louisiana State University Health Science Center-Shreveport, Center for Cardiovascular Diseases and Sciences Seminar Series, December 7th, 2020 (virtual).
41. "Obscurins: giant cytoskeletal regulators in heart disease", Stanford Cardiovascular Institute, March 16th, 2021 (virtual).
42. "Cytoskeletal regulators in health and muscle disease", Icahn School of Medicine at Mount Sinai, Cardiovascular Research Institute seminar series, June 3rd, 2021
42. "Cytoskeletal regulators in health and disease", Florida State University, Nov 10th, 2021.
44. "Unraveling obscure obscurins in heart disease", Stanford Cardiovascular Institute, March 15th, 2022 (in person).

Additional Selected Presentations at Meetings and Conferences (presenter is underlined)

1. Grogan, A., Hu, L-Y R., Ward, C., and **Kontrogianni-Konstantopoulos, A.** "Loss of binding between giant obscurin and titin results in cardiac maladaptation", 48th European Muscle Conference, Canterbury, UK, 2019.
2. Stavusis, J., Geist, J., Lace, B., Wright, N. Bonnemann, C., Ward, C.W., and **Kontrogianni-Konstantopoulos, A**, "Novel mutations in MYBPC1 associated with myogenic tremor", oral presentation, European Society of Human Genetics/European Human Genetics Conference, Gothenburg, Sweden, 2019.
3. Grogan, A., Ru, L.-Y.R., Ward, C.W., and **Kontrogianni-Konstantopoulos, A**, "Loss of binding between giant obscurin and titin results in cardiac maladaptation", poster presentation, 63rd Biophysical Society Meeting, Baltimore, MD, 2019.
4. Geist, J., Stavusis, J., Lace, B., Wright, N. Bonnemann, C., Ward, C.W., and **Kontrogianni-Konstantopoulos, A**, "Myosin Binding Protein-C Slow in health and disease", poster presentation, 63rd Biophysical Society Meeting, Baltimore, MD, 2019.
5. Guardia, T. and **Kontrogianni-Konstantopoulos, A**., "Interrogating the tumor and metastasis suppressor function of giant obscurins in breast cancer", poster presentation, SACNAS: The National Diversity in STEM Conference, San Antonio, TX, 2018.
6. Geist, J., Stavusis, J., Lace, B., Wright, N. Bonnemann, C., Ward, C.W., and **Kontrogianni-Konstantopoulos, A**, "Myosin Binding Protein-C Slow (sMyBP-C) Function, Regulation, and Disease Implications", poster presentation, 47th European Muscle Conference, Budapest, Hungary, 2018.
7. Grogan, A., Ru, L.-Y.R., Ward, C.W., and **Kontrogianni-Konstantopoulos, A**, "Loss of binding between giant obscurin and titin results in cardiac maladaptation", poster presentation, Myofilament Meeting: "Elastic Domains in Proteins of the Sarcomere: Stressors, Regulators or Rulers", Madison, WI, 2018.
8. Geist, J., Stavusis, J., Lace, B., Wright, N. Bonnemann, C., Ward, C.W., and **Kontrogianni-Konstantopoulos, A**, "Myosin Binding Protein-C Slow (sMyBP-C) Function, Regulation, and Disease Implications", poster presentation, Myofilament Meeting: "Elastic Domains in Proteins of the Sarcomere: Stressors, Regulators or Rulers", Madison, WI, 2018.
9. Wang, Li, Hu, L.Y. R., Yankasas, C., Law, R., Konstantopoulos, K. and **Kontrogianni-Konstantopoulos, A**., "Essential role of obscurin kinase domain-1 in cardiac cell adhesion and communication by regulating the phosphorylation of N-cadherin", poster presentation, 57th Annual Meeting of American Society for Cell Biology, Convention Center, Philadelphia, PA, 2017.

10. Shea, D.J., Konstantopoulos, K., and **Kontrogianni-Konstantopoulos, A**, "Loss of Giant Obscurins Enhances Migration and Cell Dynamics in Pancreatic Ductal Epithelial Cells", oral presentation, Biomedical Engineering Society, Minneapolis, MI, 2016.
11. Hu, L.-Y., R., Ackermann, M.A., Hecker, P.A., Prosser, B.L., O'Connell, K., Wright, N., Asico, L., Pedro, J., Lederer, W.J., and **Kontrogianni-Konstantopoulos, A,** "Obscurin: a New Player in Cardiac Hypertrophy", oral presentation, Myofilament Meeting: Local and Global Regulatory Networks in Muscle"-"Cardiomyopathies session", Madison, WI, 2016.
12. Wang, L., Hu, L.-Y., R., and **Kontrogianni-Konstantopoulos, A,** "Essential Role of Kinase Domain 2 of Obscurin in Cardiac Cell Adhesion and Communication bt regulating the Phosphorylation of N-cadherin", poster presentation, Myofilament Meeting: "Local and Global Regulatory Networks in Muscle", Madison, WI, 2016.
13. Geist, J., Tagaki, H., Ward, C.W., Sellers, J., and **Kontrogianni-Konstantopoulos, A**, "Regulation and roles of Myosin Binding Protein-C Slow in Adult Skeletal Muscles", poster presentation, Myofilament Meeting: "Local and Global Regulatory Networks in Muscle", Madison, WI, 2016.
14. Ackermann, M.A. King, B, Perry, N.A., Rudloff, M, Berndsen, C., Wright, N., Hecker, P., and **Kontrogianni-Konstantopoulos, A.,** "Small obscurins at the intercalated disc mediate structure, cell size and adhesion**",** poster presentation, 60th annual meeting of the Biophysical Society, Convention Center, Los Angeles, CA, 2016.
15. Hu, L-Y R., Ackermann, A, Hecker, P., Prosser, B.L., Wright N., O'Connell, K.A., Lederer, W.J., and **Kontrogianni-Konstantopoulos, A.** "Obscurin: a new player in cardiac hypertrophy", poster presentation, 55th Annual Meeting of American Society for Cell Biology, Convention Center, San Francisco, CA, 2015.
16. Shea, D.J., Konstantopoulos, K., and **Kontrogianni-Konstantopoulos, A**, "Loss of Giant Obscurins Enhances Migration and Cell Dynamics in Pancreatic Ductal Epithelial Cells", oral presentation, Biomedical Engineering Society, Tampa, FL, 2015.
17. Ackermann, M.A. Perry, N.A., and **Kontrogianni-Konstantopoulos, A.,** "Obscurins' Mechanistic Involvement in Signal Transduction at the Cardiac Intercalated Disc**",** oral presentation, 59th annual meeting of the Biophysical Society, Convention Center, Baltimore, MD, 2015.
18. Stroka, K., Shriver, M., Konstantopoulos, K., and **Kontrogianni-Konstantopoulos, A**, "Loss of Giant Obscurins Alters Breast Epithelial Cell Mechanobiology", oral presentation, Biomedical Engineering Society, San Antonio, TX, 2014.
19. Wang, P., Chen, S-H, Hung, w-C, Paul, C., Zhu, F., Guan, P-P., Huso, D.L., **Kontrogianni-Konstantopoulos, A.,** and Konstantopoulos, K., "Fluid Shear Promotes Chondrosarcoma Cell Invasion by Activating Matrix Metalloproteinase-12 via IGF-2 and VEGF-Signaling Pathways", oral presentation, Biomedical Engineering Society, San Antonio, TX, 2014.
20. Ackermann, M.A., Perry, N.A., and **Kontrogianni-Konstantopoulos, A.,** "Novel Locations, Familiar Functions: Obscurin at the Intercalated Disc", oral/poster presentation, Myofilament Meeting: Modifiers and Modulators of Myofilament Function, Madison, WI, 2014.
21. Shriver, M., Stroka, K., Vitolo, M.I., Martin, S.S., Huso, D. L., Konstantopoulos, K., and **Kontrogianni-Konstantopoulos, A**, "Loss of Giant Obscurins from Breast Epithelium Promotes Epithelial-to-Mesenchymal Transition, Tumorigenicity and Metastasis", poster presentation, Safeway Breast Cancer Retreat, Mount Washington, Baltimore, MD, 2014.
22. Ackermann, M.A., Perry, N.A., and **Kontrogianni-Konstantopoulos, A.,** "Novel Locations, Familiar Functions: Obscurin at the Intercalated Disc", poster presentation, 58th annual meeting of the Biophysical Society, Convention Center, San Diego, CA, 2014.
23. Hu, L-Y., R., Ackermann, M.A., Hacker, P. A., Prosser, B.L., Wright, N.T., Perry, N., A., Shriver, M., O'Connell, K., Lederer, J. and **Kontrogianni-Konstantopoulos, A**., "Obscurin: a New Player in Cardiac Hypertrophy", poster presentation, Myofilament Meeting: Modifiers and Modulators of Myofilament Function, Madison, WI, 2014.

24. Stroka, K., Shriver, M., Konstantopoulos, K., and **Kontrogianni-Konstantopoulos, A**, "Loss of Giant Obscurins Promotes a Metastatic Phenotype in Breast Epithelium", oral presentation, American Institute of Chemical Engineering, San Francisco, CA, 2013.
25. Stroka, K., Shriver, M., Konstantopoulos, K., and **Kontrogianni-Konstantopoulos, A**, "Loss of Giant Obscurins Promotes a Metastatic Phenotype in Breast Epithelium", oral presentation, Biomedical Engineering Society, Seattle, WA, 2013.
26. Shriver, M., Stroka, K., Konstantopoulos, K., and **Kontrogianni-Konstantopoulos, A**., "Loss of Giant Obscurins Expression in Breast Epithelium Disrupts Epithelial Junctions and Promotes Cell Motility and Invasion", poster presentation, American Association for Cancer Research, Convention Center, Washington, MD, 2013.
27. Perry, N.A. and **Kontrogianni-Konstantopoulos, A**., "Ectopic Expression of an Obscurin Signaling Cassette Decreases Migration and Invasion of Metastatic Breast Cancer Cells", poster presentation, American Association for Cancer Research, Convention Center, Washington, MD, 2013.
28. Ackermann, M.A., Contreras, M., Patel, P. and **Kontrogianni-Konstantopoulos, A**., "Mechanistic Understanding of the Involvement of MyBP-C slow in the Development of Distal Arthrogryposis", poster presentation, 57th annual meeting of the Biophysical Society, Convention Center, Philadelphia, PA, 2013.
29. Hu, L.Y., and **Kontrogianni-Konstanopoulos, A.** "The kinase domains of obscurin interact with intercellular adhesion proteins", poster presentation, 52nd Annual Meeting of American Society for Cell Biology, Convention Center, San Francisco, CA, 2012.
30. Ackermann, M.A., Valenti, J., Takagi, Y., Homsher, E., Sellers, J. and **Kontrogianni-Konstantopoulos A.** "The Actomyosin Regulatory Properties of Myosin Binding Protein-C Slow are affected by Point Mutations Present in Distal Arthrogryposis Type 1", poster presentation, Myofilament Meeting: Elastic Proteins of the Sarcomere, Madison, WI, 2012.
31. Ackermann, M.A., Valenti, J., and **Kontrogianni-Konstantopoulos, A**., "A New Tale of an Old Story: Obscurin Bridges the Sarcomere to the Intercalated Disc", poster presentation, Experimental Biology Society, Convention Center, San Diego, CA, 2012.
32. Shriver, M. and **Kontrogianni-Konstantopoulos**, **A.** "Obscurins Invade Breast Cancer Research", poster presentation, Experimental Biology Society, Convention Center, San Diego, CA, 2012.
33. Perry, N.A. Marey Shriver, Marie G. Mameza, Bryan Grabias, Eric Balzer and **Kontrogianni-Konstantopoulos A.,** "Obscurins: Giant Proteins with Tumor Suppressing Activities in Breast Cancer", poster presentation, Experimental Biology Society, Convention Center, San Diego, CA, 2012.
34. Ackermann, M.A., Valenti, J., and **Kontrogianni-Konstantopoulos, A**., "Myosin Binding Protein-C Slow: an Intricate Subfamily of Phosphoproteins", oral presentation, 56th annual meeting of the Biophysical Society, Convention Center, San Diego, CA, 2012.
35. Vafiadaki, E.L., Lam, C.K., Zhao, W., Arvanitis, D.A., Sanoudou, D., **Kontrogianni-Konstantopoulos, A.,** and Kranias, E.G. "HAX-1: a mitochondrial anti-apoptotic protein with emerging roles in cardiac disease", poster presentation, British Society for Cardiovascular Research, London, UK, 2011.
36. Koontz, J. Yap, S., Perry, N.A., and **Kontrogianni-Konstantopoulos, A**., "HAX-1: a multifaceted family of apoptotic regulators", poster presentation, Mitochondrial Biology Symposium, National Institute of Health, NHLBI, Bethesda, MD, 2011.
37. Ackermann, M.A., Valenti, J., and **Kontrogianni-Konstantopoulos, A.,** "New obscurins play a role in cardiac electrochemical signaling", poster presentation, 55th annual meeting of the Biophysical Society, Convention Center, Baltimore, MD, 2011.
38. Yap, S.V., Koontz, J., Perry, N.A., and **Kontrogianni-Konstantopoulos, A.,** "HAX-1: a Multifaceted Family of Apoptotic Regulators", poster presentation, 55th annual meeting of the Biophysical Society, Convention Center, Baltimore, MD, 2011.

39. Bloch, R.J., Busby, B., Oashi, T., Willis, C., Ackermann, M., **Kontrogianni-Konstantopoulos**, **A.** and Mackerell, A., poster presentation, "Interaction of Obscurin with Small ankyrin 1", 55th annual meeting of the Biophysical Society, Convention Center, Baltimore, MD, 2011.
40. Hu, L.-Y. R., Valenti, J. and **Kontrogianni-Konstantopoulos, A.** "Localization of obscurin kinases in the extracellular matrix of striated muscle cells", poster presentation, 50th annual meeting, American Society of Cell Biology, Convention Center, Philadelphia, PA, 2010.
41. Ackermann, M.A., and **Kontrogianni-Konstantopoulos, A.,** "MyBP-C: a Novel Phosphoprotein of Skeletal Muscles", poster presentation, 54th annual meeting of the Biophysical Society, Convention Center, San Francisco, CA, 2010.
42. Borzok, M.A., Hu, L.Y., Bowman, A.L., Bloch, R.J., and **Kontrogianni-Konstantopoulos, A.,** "Obscurin Interacts with a Novel Isoform of Myosin Binding Protein C-Slow to Regulate the Assembly of Thick Filaments", poster presentation, 53rd annual meeting of the Biophysical Society, Convention Center, Boston, MA, 2009.
43. Yap, S., Vafiadaki, E., Strong, J., and **Kontrogianni-Konstantopoulos, A**., "The multifaceted localization of the anti-apoptotic protein HAX-1 in striated muscle cells", poster presentation, Mitochondrial Biology in Cardiovascular Health and Diseases Conference, National Institute of Health, NHLBI, Bethesda, MD, 2008.
44. Vafiadaki, E,L., Arvanitis, D., Pagakis, S.N., Papalouka, V., Sanoudou, D., **Kontrogianni-Konstantopoulos, A.,** and Kranias, E.G., "The anti-apoptotic protein HAX-1 interacts with SERCA2 and regulates its protein levels to promote cell survival", poster presentation, Mitochondrial Biology in Cardiovascular Health and Diseases Conference, National Institute of Health, NHLBI, Bethesda, MD, 2008.
45. Borzok, M.A., Ward, C.W., Randall, W., **Kontrogianni-Konstantopoulos, A**., and Bloch, R.J., " siRNA targeting small ankyrin 1 selectively disrupts the network compartment of the sarcoplasmic reticulum in adult skeletal muscle fibers", poster presentation, 52nd annual meeting of the Biophysical Society, Convention Center, Long Beach, CA, 2008.
46. Busby, B., Borzok, M.A., **Kontrogianni-Konstantopoulos, A.** and Bloch, R.J., "Short electronegative sequences mediate binding of obscurin to sAnk1", poster presentation, 52nd annual meeting of the Biophysical Society, Convention Center, Long Beach, CA, 2008.
47. Vafiadaki, E., Sanoudou, D., Arvanitis, D., Catino, D., Kranias, E.G. and **Kontrogianni-Konstantopoulos, A.**, "HAX-1 is a new interacting protein of phospholamban and a novel regulator of calcium homeostasis and cardiac cell survival", poster presentation, European Society of Human Genetics, Nice, France, 2007.
48. Vafiadaki, E., Sanoudou, D., Arvanitis, D., Catino, D., **Kontrogianni-Konstantopoulos, A.,** and Kranias, E.G., "Identification of a Novel Interaction between HAX-1 and Phospholamban in Cardiac Muscle and its Role in Cell Survival", poster presentation, European Society of Cardiology, Vienna, Austria, 2007.
49. Arvanitis, D.A., Vafiadaki, E., Mitton, B., Gregory, K.N., Del Monte, F., **Kontrogianni-Konstantopoulos, A.**, Sanoudou, D., Kranias, E.G., "Histidine-Rich Calcium Binding Protein as Novel Mediator Between Sarcoplasmic Reticulum Ca uptake and Release", poster presentation, European Society of Cardiology, Vienna, Austria, 2007.
50. Arvanitis, D.A., Sanoudou, D., Kolokathis, F., Vafiadaki, E., **Kontrogianni-Konstantopoulos, A**., Dorn, G.W. 2nd, Kremastinos, D., Kranias, E.G., " Genetic Variants of Histidine-Rich Calcium Binding Protein May Be Associated With Sudden Cardiac Death In Dilated Cardiomyopathy Patients", poster presentation, European Society of Human Genetics, Nice, France, 2007.
51. Arvanitis, D.A., Vafiadaki, E., Mitton, B., Gregory, K.N., Del Monte, F., **Kontrogianni-Konstantopoulos, A**., Sanoudou, D., Kranias, E.G., " Histidine-Rich Calcium Binding protein Interacts with SERCA2 in a Ca-dependent manner", poster presentation, European Society of Human Genetics, Nice, France, 2007.

52. Borzok, M.A., **Kontrogianni-Konstantopoulos, A**., Randall, W., and Bloch, R.J., "Small ankyrin organizes the network compartment of the sarcoplasmic reticulum around the contractile apparatus of striated muscle", poster presentation, 47th annual meeting, American Society for Cell Biology, Convention Center, Washington, D.C., 2007.
53. Ziman, A., **Kontrogianni-Konstantopoulos, A.**, Russell, M.W., Parker, K., Bloch, R.J., and Lederer, W.J., " Obscurin in SR organization in cultured adolescent cardiomyocytes", poster presentation, 51st annual meeting, Biophysical Society, Convention Center, Baltimore, MD, 2007.
54. Borzok, M.A., Catino, D., Nicholson, J., **Kontrogianni-Konstantopoulos, A**., and Bloch, R.J., "Mapping the binding site on small ankyrin 1 for obscurin", poster presentation, 46th annual meeting of the American Society for Cell Biology, Convention Center, San Diego, CA, 2006.
55. Bowman, A.L., **Kontrogianni-Konstantopoulos, A.,** O'Neill, A., and Bloch, R.J., "Obscurin interacts with filamin C and is present at costameres", poster presentation, 46th annual meeting of the American Society for Cell Biology, Convention Center, San Diego, CA, 2006.
56. Busby, B., Borzok, M.A., **Kontrogianni-Konstantopoulos, A**., and Bloch, R.J., "Characterization of the binding site on obscurin for small ankyrin 1", poster presentation, 46th annual meeting of the American Society for Cell Biology, Convention Center, San Diego, CA, 2006.
57. **Kontrogianni-Konstantopoulos, A.,** Catino, D.H., Strong, J.C., Sutter, S., Pumplin, D.W., Russell, M.W., and Bloch, R.J., "Obscurin Modulates the Organization of Sarcomeres and the Sarcoplasmic Reticulum", poster presentation, 45th annual meeting of the American Society for Cell Biology, Convention Center, San Francisco, CA, 2005.
58. Bowman, A.L., **Kontrogianni-Konstantopoulos, A.,** Catino, D.H., Gonzalez-Serratos, H., and Bloch, R.J., "Localization of obscurin in skeletal muscle fibers", poster presentation, 45th annual meeting of the American Society for Cell Biology, Convention Center, San Francisco, CA, 2005.
59. Ackermann, M.A., **Kontrogianni-Konstantopoulos, A.,** and Bloch, R.J., "Characterization of the binding site of small ankyrin 1, a protein of the sarcoplasmic reticulum, for obscurin, a protein that surrounds sarcomeres in striated muscle", poster presentation, 45th annual meeting of the American Society for Cell Biology, Convention Center, San Francisco, CA, 2005.
60. Raeker, M.O., **Kontrogianni-Konstantopoulos, A.,** Sutter, S.B., Borisov, A.B., Bloch, R.J., Lyons, L.E., and Russell, M.W., "Obscurin depletion destabilizes the M band and inhibits sarcomeric myosin incorporation in developing zebrafish embryos", poster presentation, 45th annual meeting of the American Society for Cell Biology, Convention Center, San Francisco, CA, 2005.
61. **Kontrogianni-Konstantopoulos, A.,** Catino, D.H., and Bloch, R.J., " Spatiotemporal Relationship of Obscurin to Thick Filaments, and to Proteins of the M-Line and Z-Disk during Myofibrillogenesis in C2C12 cells" poster presentation, 44th annual meeting of the American Society for Cell Biology, Convention Center, Washington, D.C., 2004.
62. Bowman, A.L., Lu, G., Catino, D.H., **Kontrogianni-Konstantopoulos, A.,** and Bloch, R.J., "Obscurin Signaling through its Rho-GEF/PH Domains" poster presentation, 44th annual meeting of the American Society for Cell Biology, Convention Center, Washington, D.C., 2004.
63. **Kontrogianni-Konstantopoulos, A.,** Catino D.H., Bowie, A. and Bloch, R.J., " The Giant Sarcomeric Protein, Obscurin, is Involved in the Assembly of the A-band" poster presentation, 43rd annual meeting of the American Society for Cell Biology, Convention Center, San Francisco, CA, 2003.
64. **Kontrogianni-Konstantopoulos, A.,** Catino, D.H., Randall, W. and Bloch, R.J., "The Giant Sarcomeric Protein Obscurin is Essential in the Assembly and Organization of Myosin Thick Filaments into Periodic A-bands" poster presentation, Muscle Research Retreat, University of

Maryland, Baltimore, School of Medicine, Dept. of Physiology, Interdisciplinary Training Program in Muscle Biology, 2003.

65. **Kontrogianni-Konstantopoulos, A.,** Jones, E., van Rossum, D., and Bloch, R.J., "Obscurin is a Ligand for Small Ankyrin 1 in Skeletal Muscle" poster presentation, 42nd annual meeting of the American Society for Cell Biology, Convention Center, San Francisco, California, 2003.
66. **Kontrogianni-Konstantopoulos, A.,** " Characterization of Proteins Involved in the Organization of the Sarcomere and the Sarcoplasmic Reticulum in Skeletal Myofibers" oral presentation, Departmental Seminar Series, University of Maryland, Baltimore, School of Medicine, Dept. of Physiology, 2003.
67. **Kontrogianni-Konstantopoulos, A.,** Catino, D., and Bloch, R.J., "Kinetics analysis of sAnk1/obscurin interaction using a Biacore 3000 surface plasmon resonance biosensor", poster presentation, Muscle Research Retreat, 2002, University of Maryland, Baltimore, School of Medicine, Dept. of Physiology, Interdisciplinary Training Program in Muscle Biology, 2002.
68. **Kontrogianni-Konstantopoulos, A.,** and Bloch, R.J., " The hydrophilic domain of small Ankyrin 1 Interacts with the Two NH_2-terminal Immunoglobulin Domains of Titin ", poster presentation, 41st annual meeting of the American Society for Cell Biology, Convention Center, Washington, D.C., 2001.
69. **Kontrogianni-Konstantopoulos, A.,** van Rossum, D., Jones, E., and Bloch, R.J. "Ligands of the Small Ankyrin of the Sarcoplasmic Reticulum: Titin and Kalirin" poster presentation, Muscle Research Retreat, University of Maryland, Baltimore, School of Medicine, Dept. of Physiology, Interdisciplinary Training Program in Muscle Biology, 2001.
70. **Kontrogianni-Konstantopoulos, A.,** "Identification of the minimal domain of protein 4.1R involved in the formation of fodrin/actin complexes in adult rat brain", oral presentation, 42nd annual meeting of the American Society of Hematology, Convention Center, San Francisco, CA, 2000.
71. **Kontrogianni-Konstantopoulos, A.,** Huang, S.-C., and Benz, E.J., Jr., "Characterization of the complex 4.1 gene family in adult skeletal muscle", poster presentation, 40th annual meeting of the American Society for Cell Biology, Convention Center, San Francisco, CA, 2000.
72. **Kontrogianni-Konstantopoulos, A.,** Huang, S.-C., and Benz, E.J., Jr., " The cytoskeletal protein 4.1R associates with major components of the sarcomere in skeletal muscle", poster presentation, Research Retreat, Johns Hopkins University School of Medicine, Department of Medicine, 2000.
73. **Kontrogianni-Konstantopoulos, A.,** Huang, S.-C., and Benz, E.J., Jr., " The cytoskeletal protein 4.1R associates with major components of the sarcomere in skeletal muscle", poster presentation, 41st annual meeting of the American Society of Hematology, Ernest N. Memorial Convention Center, New Orleans, LA, 1999.
74. **Kontrogianni-Konstantopoulos, A.**, Huang, S.-C., and Benz, E.J., Jr., " A non-erythroid 4.1R protein interacts with major components of the contractile apparatus" poster presentation, 39th annual meeting of the American Society for Cell Biology, Convention Center, Washington, D.C., 1999.
75. **Kontrogianni-Konstantopoulos, A.,** "Expression of an alternatively spliced, muscle-specific exon in protein 4.1R", oral presentation, 40th annual meeting of the American Society of Hematology, Miami Beach Convention Center, Miami Beach, FL, 1998.
76. **Kontrogianni-Konstantopoulos, A**., Schultz C., Gonzalez-Rimbau M., and Flytzanis C.N., "Characterization of a novel member of the steroid receptor superfamily in the sea urchin *S. purpuratus*", poster presentation, Developmental Biology of the Sea Urchin X meeting, Marine Biological Laboratory, Woods Hole, MA, 1996.
77. Flytzanis C.N., Vlahou A., **Kontrogianni-Konstantopoulos A.,** "SpCOUP-TF and SpSHR2:

the orphan sea urchin receptors", poster presentation, Steroid/Thyroid/Retinoic acid Gene Family conference, Lake Tahoe, CA, 1996.

78. **Kontrogianni-Konstantopoulos, A.**, "Characterization and Functional analysis of a novel member of the nuclear receptor superfamily in sea urchin", oral presentation, Molecular and Development and Reproduction and Technology (MAD RAT) seminar series, Dept. of Cell Biology, Baylor College of Medicine, Houston, TX, 1996.
79. **Kontrogianni-Konstantopoulos, A.,** "SpSHR2: the sea urchins' other orphan receptor", oral presentation, MAD RAT, Dept. of Cell Biology, Baylor College of Medicine, Houston, TX, 1995.
80. **Kontrogianni-Konstantopoulos, A.**, "Identification of the second member of the steroid receptor superfamily in sea urchin", oral presentation, Cell Biology Workshop, Dept. of Cell Biology, Baylor College of Medicine, Houston, TX, 1993.
81. **Kontrogianni, A.**, "Growth factors, Oncogenes and Embryogenesis; a review", oral presentation, Seminar Series in Developmental Biology, National University of Patras, Greece, 1991.
82. **Kontrogianni, A.,** "Complex hormonal effects in plant development", oral presentation, Seminar Series in Plant Physiology, National University of Patras, Greece, 1991.