

CURRICULUM VITAE**Kevin P. Campbell, Ph.D.****Personal Data**

Place of Birth: Brooklyn, New York
 Citizenship: United States
 Marital Status: Married; Three Children

Home Address: 931 Evergreen Court
 Iowa City, IA 52245

Current Position

Investigator, Howard Hughes Medical Institute
 Chair, Department of Molecular Physiology and Biophysics
 Director, Wellstone Muscular Dystrophy Cooperative Research Center
 Roy J. Carver Biomedical Research Chair in Molecular Physiology and Biophysics
 Professor, Neurology and Internal Medicine
 University of Iowa Roy J. and Lucille A. Carver College of Medicine

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 285 Newton Road
 Iowa City, IA 52242-1101

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 Fax: (319) 355-6957
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 (Department): <http://www.physiology.uiowa.edu>
 (HHMI): http://www.hhmi.org/research/investigators/campbell_bio.html
 (Center): <http://www.medicine.uiowa.edu/mdcrc/>

Education

| | | |
|------|-------|---------------------------------------------------------------------------------------------|
| 1979 | Ph.D. | Biophysics, University of Rochester, School of Medicine & Dentistry, Rochester, New York |
| 1976 | M.S. | Biophysics, University of Rochester, School of Medicine & Dentistry, Rochester, New York |
| 1973 | B.S. | Physics, Manhattan College, Bronx, New York |

Post-Graduate Education

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|-----------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| 1978-1981 | Postdoctoral Fellow | Banting and Best Department of Medical Research University of Toronto Toronto, Ontario, Canada Advisor: Dr. David MacLennan |
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Academic Appointments

| | |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------|
| 2005- | Chair, Department of Molecular Physiology and Biophysics, University of Iowa |
| 2005- | Professor, Department of Internal Medicine, University of Iowa |
| 2002-2005 | Interim Department Chair, Department of Physiology and Biophysics, University of Iowa |
| 2001- | University of Iowa Gene Therapy Center Program Member |
| 2001- | University of Iowa Cancer Center Program Member |
| 1999- | Carver Trust - Roy J. Carver Biomedical Research Chair in Physiology and Biophysics, University of Iowa |
| 1997- | Professor, Department of Neurology, University of Iowa |
| 1996- | Diabetes Endocrinology Research Center Program Member |
| 1989- | Investigator, Howard Hughes Medical Institute |
| 1989-1999 | University of Iowa Foundation Distinguished Professor of Physiology and Biophysics |
| 1988- | Professor, Department of Molecular Physiology and Biophysics, University of Iowa |
| 1987- | University of Iowa Medical Scientist Training Program Faculty Mentor |
| 1985-1988 | Associate Professor, Department of Physiology and Biophysics, University of Iowa |
| 1981-1985 | Assistant Professor, Department of Physiology and Biophysics, University of Iowa |
| 1978-1981 | Postdoctoral Fellow with Dr. David MacLennan, Banting and Best Department of Medical Research, University of Toronto, Toronto, Ontario, Canada |
| 1976-1978 | Teaching Assistant, Undergraduate and Graduate Biochemistry, University of Rochester |
| 1973-1977 | Graduate Fellow, Biophysics Training Grant, Department of Radiation Biology and Biophysics, University of Rochester |

Honors and Awards

| | |
|------|-----------------------------------------------------------------------------------------------|
| 2010 | A. Ross McIntyre Award |
| 2009 | March of Dimes Prize in Developmental Biology |
| 2007 | Presidential Lecturer, The University of Iowa |
| 2006 | American Academy of Arts and Sciences |
| 2005 | Carver College of Medicine Distinguished Mentor Award |
| 2004 | National Academy of Sciences |
| 2004 | American Academy of Microbiology |
| 2004 | American Academy of Neurology Lecturer Award |
| 2004 | Rochester Distinguished Scholar Award |
| 2003 | University of Manitoba Samuel Weiner Distinguished Visitor Award |
| 2001 | Elsevier Science Award at the World Muscle Society Meeting |
| 2001 | S. Mouchly Small, MDA Scientific Achievement Award |
| 2001 | Weil Award for Best Paper in Experimental Neuropathology |
| 2000 | G. Conte Prize 2000 for Basic Research |
| 1999 | Institute of Medicine of the National Academy of Sciences |
| 1999 | Carver Trust - Roy J. Carver Biomedical Research Chair in Molecular Physiology and Biophysics |
| 1999 | Fellow of the Biophysical Society |
| 1997 | Duchenne-Erb-Preis Award (German Muscular Dystrophy Association) |
| 1996 | Esther Benjamin Memorial Lecture Award |
| 1996 | Landacre Society Lecture Award |
| 1996 | American Academy of Neurology Decade of the Brain Award |
| 1995 | INSERM/Académie des Sciences Prix |
| 1994 | McGill University F.L. McNaughton Lecturer |
| 1994 | Vanderbilt University 1994 Lamson Memorial Lecturer |
| 1994 | ASBMB-AMGEN Award |
| 1994 | International Albrecht Fleckenstein Award |
| 1993 | Muscular Dystrophy Association Service Merchandise Leadership Award |
| 1992 | The Emilio Trabucchi Foundation Medal |
| 1989 | Howard Hughes Medical Institute Investigator |

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|-----------|------------------------------------------------------------------------------------|
| 1989 | University of Iowa Foundation Distinguished Professor of Physiology and Biophysics |
| 1990 | Regent's Award for Faculty Excellence |
| 1984 | Finalist for 1984 Louis N. Katz Research Prize for Young Investigators |
| 1984-1989 | American Heart Association Established Investigator |
| 1978 | National Science Foundation - NATO Postdoctoral Fellowship |
| 1978-1981 | Medical Research Council of Canada Postdoctoral Fellowship |
| 1977-1978 | Elon Huntington Hooker Fellowship |
| 1974-1977 | Graduate Fellowship - NIH Biophysics Training Grant |
| 1973 | Sigma Pi Sigma Bendix Award |
| 1973 | Phi Beta Kappa |
| 1972 | Sigma Xi |

Professional Activities

Affiliations

| | |
|----------------------------------------------------|-----------------------------------------------------|
| American Academy of Microbiology | Biophysical Society |
| American Academy of Neurology | Institute of Medicine, National Academy of Sciences |
| American Association for Advancement of Science | National Academy of Sciences |
| American Society for Biology and Molecular Biology | New York Academy of Sciences |
| American Society of Biological Chemistry | Society for Developmental Biology |
| American Society for Cell Biology | Society For Glycobiology |
| American Society for Gene Therapy | Society for Neuroscience |
| American Society of Human Genetics | Society of General Physiologists |
| American Society for Microbiology | Sigma Xi |
| American Physiology Society | World Muscle Society |

Editorial Boards

| | |
|--------------|---------------------------------------------------------|
| 2011-present | PLoS Currents: Muscular Dystrophy |
| 2010-present | Skeletal Muscle, Co-Editor-in-Chief |
| 2004-present | Neuromuscular Disorders |
| 2004-2006 | Molecular and Cellular Biochemistry |
| 2003-2006 | Drug Discovery Today: Therapeutic Strategies |
| 2002-present | NeuroMolecular Medicine |
| 2001-present | Acta Myologica |
| 2001-2004 | American Society for Biochemistry and Molecular Biology |
| 1999-2004 | Journal of Cell Biology |
| 1996-2001 | Journal of Biological Chemistry |
| 1995-1997 | Physiological Reviews |
| 1988-1993 | Cell Calcium |
| 1988-1993 | Journal of Biological Chemistry |
| 1987-1993 | Circulation Research |

Reviewer (Journals)

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|------------------------------------|------------------------------------------------------|
| Acta Neuropathologica | Journal of Neuroscience |
| American Journal of Human Genetics | Journal of Neuropathology and Experimental Neurology |
| American Journal of Pathology | Journal of the Neurological Sciences |
| American Journal of Physiology | Matrix Biology |
| Annals of Neurology | Molecular and Cellular Biology |

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|----------------------------------------------|------------------------------------------------|
| Archives of Biochemistry and Biophysics | Molecular and Cellular Neuroscience |
| Biochimica et Biophysica Acta | Molecular Biology of the Cell |
| BioMed Central | Molecular Brain Research |
| Biophysical Journal | Molecular Pharmaceutics |
| Cardiovascular Research | Molecular Pharmacology |
| Cell | Molecular Therapy |
| Cell Metabolism | Nature |
| Circulation | Nature Cell Biology |
| Circulation Research | Nature Genetics |
| Current Biology | Nature Medicine |
| Development | Nature Neuroscience |
| Developmental Biology | Nature Review Molecular Cell Biology |
| Developmental Cell | Neurobiology of Disease |
| EMBO Molecular Medicine | Neurology |
| European Journal of Human Genetics | Neuromuscular Disorders |
| FASEB | Neuron |
| FEBS | Neuroscience |
| FEBS Letters | New England Journal of Medicine |
| Genome Research | PLoS Medicine |
| Glycobiology | PLoS ONE |
| Human Gene Therapy | Proceedings of the National Academy of Science |
| Human Molecular Genetics | Science |
| Journal of Biological Chemistry | Stem Cell |
| Journal of Cell Biology | Traffic |
| Journal of Cell Science | Trends in Neuroscience |
| Journal of Clinical Investigation | Trends in Pharmacological Sciences |
| Journal of Comparative Neurology | Virology |
| Journal of Molecular and Cellular Cardiology | |

Reviewer (Grants)

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| 2008 | Inserm, Myology Lab Site Visit (Paris, France) |
| 2005-2007 | Council Member, National Arthritis and Musculoskeletal and Skin Disease Advisory Council |
| 2003 | March of Dimes Grant Reviews |
| 2001-2005 | NIH Skeletal Muscle Biology and Exercise Physiology Study Section |
| 1999 | NIH, Grant Reviews |
| 1996-2009 | Member, MDA Scientific Advisory Committee |
| 1992 | NIH, Site Visit (Indiana University) |
| 1991-1995 | NIH, Physiology Study Section |
| 1989-1995 | Member, MDA Fellowship Review Committee |
| 1989-1992 | Member, AHA's Cell Transport and Metabolism Research Study Committee |
| 1988 | NIH, Site Visit (University of Miami) |
| 1987 | NIH, Site Visit (University of Washington) |
| 1986 | NIH, NIADDK Conference Grant |
| 1986 | Member, NSF - Presidential Young Investigator Advisory Panel |
| 1985-1988 | Member, Research Peer Review Committee, AHA - Iowa Affiliate |

National & International Committees

| | |
|--------------|------------------------------------------------------------------|
| 2011-present | Vanderbilt Prize in Biomedical Science External Review Committee |
| 2010-present | T32 External Networking Committee, The Ohio State University |
| 2010-present | Member, Biomedical Science Advisory Board, Vanderbilt University |
| 2009-present | Scientific Advisor, Gavriel Meir Trust |

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|--------------|----------------------------------------------------------------------------------|
| 2006-present | Scientific Advisory Board Committee, Duke NUS-Graduate Medical School, Singapore |
| 2004-present | Scientific Advisory Board, Cure Duchenne |
| 2004-2005 | President, Society of General Physiologists |
| 2003-2006 | Council Member, American Society of Matrix Biology |
| 2001-2004 | Pharmaceutical Research, MyoContract |
| 2001-2003 | NIH Skeletal Muscle Biology Study Section |
| 2001-2006 | Member, Executive Board of the World Muscle Society |
| 1998-2004 | Member, Muscular Dystrophy Association's Gene Therapy Task Force |
| 1997 | Steering Committee for Huntington's Disease Society of America |
| 1993-1995 | Council Member, Society of General Physiologists |
| 1988-1991 | Officer of the Biophysical Society Council |

University Committees

| | |
|--------------|-----------------------------------------------------------------------------------------------|
| 2009-present | Carver College of Medicine Research Advisory Council |
| 2009-2010 | Internal Advisory Committee on Genetics for the Carver College of Medicine |
| 2008-2009 | Animal Care Facilities Planning Task Force |
| 2007 | Intercollegiate Task Force on the Organization of Research and Education in the Life Sciences |
| 2007-present | Office of Animal Resources Advisory Committee |
| 2006 | Distinguished Mentor Nomination Committee |
| 2003 | Holden Comprehensive Cancer Center Space Committee |
| 2003-2008 | Molecular Biology Executive Committee |
| 2003-2004 | Steering Committee, Presidential Biological Scholar Program |
| 2003-2004 | Search Committee, Department of Internal Medicine |
| 2002-2009 | Executive Committee, Neuroscience Program |
| 2002-present | Medical Council |
| 2001-2005 | Curriculum Committee, Neuroscience Program |
| 2000-2004 | College of Medicine Molecular Biology Building B Planning Committee |
| 2000-2002 | Task Force on Animal Imaging |
| 1997-2006 | Member, Neuromuscular Disease Conference |
| 1997 | Medical Scientist Training Program Review Committee |
| 1996-2003 | College of Medicine Capital Planning Liaison Committee |
| 1995-2005 | Howard Hughes Medical Institute, College of Medicine Seminar Series |
| 1995-2003 | College of Medicine Research Advisory Council |
| 1995-2000 | College of Medicine Research Week Committee |
| 1995-2000 | Hybridoma Facility Advisory Committee |
| 1995-1996 | Search Committee, Department of Biochemistry |
| 1994-1999 | Committee for the Initiative in the Biosciences |
| 1994-1995 | Associate Deans' Search Committee for the College of Medicine |
| 1993-present | Executive Committee of the Cardiovascular Center |
| 1993-1994 | Review Committee for Vice President for Research |
| 1991-1994 | Search Committee for the Dean of the College of Medicine |
| 1990-1991 | Microbiology Review and Search Committee |
| 1990 | Radiation Research Laboratory Review Committee |
| 1989-1992 | Medical Bio-Science Subcommittee of the University Radiation Protection Committee |
| 1988-1992 | AHA Medical Student Research Fellowship Program Selection Committee |
| 1986-1989 | College of Medicine Research Committee |

Departmental Committees

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|------|-----------------------------------------------------------|
| 1995 | Co-Chairman, Physiology and Biophysics Computer Committee |
| 1993 | Chairman, Dr. Charles Wunder Review |
| 1991 | Physiology and Biophysics Faculty Search Committee |

1990 Chairman, Neuroscience Workshop
 1989-1990 Chairman, Physiology and Biophysics Faculty Search Committee
 1989-2002 Chairman, Physiology Workshop
 1987-2002 Departmental Executive Committee
 1986-1987 Chairman, Physiology and Biophysics Seminar Committee
 1984-1986 Physiology and Biophysics Computer Committee
 1983-1986 Chairman, Physiology and Biophysics Graduate Admissions Committee
 1982-1986 Chairman, Physiology and Biophysics Graduate Recruiting Poster Committee
 1982-1986 Physiology and Biophysics Graduate Admissions Committee
 1982-1984 Physiology and Biophysics Equipment User Committee
 1981-1983 Physiology and Biophysics Faculty Search Committee

Reviews of Academic Departments and Centers

2010-present **Vanderbilt Biomedical Science Advisory Board**
 Review of the Vanderbilt University School of Medicine

2006-present **Duke-NUS Graduate Medical School, Singapore Scientific Advisory Board**
 Review of the University of Duke University Graduate Medical School, Singapore

2005-present **Minnesota Wellstone Scientific Advisory Committee**
 Review of the University of Minnesota's Paul and Sheila Wellstone Muscular Dystrophy Center

2005 **University of Pennsylvania School of Medicine**
 Review of the University of Pennsylvania School of Medicine Department of Physiology

2004 **Duke University**
 Review of the Duke University School of Medicine Department of Cell Biology

Scientific Meeting Organization

2009 **Organizer, Iowa Wellstone Face-to-Face Meeting, *University of Iowa Wellstone MD Center***

2008 **Organizer and Session Chair, Iowa Congenital Muscular Dystrophy Meeting, *University of Iowa Wellstone MD Center***

2007 **Organizer, Congenital Muscular Dystrophy and Dystroglycan Glycosylation Meeting, *World Muscle Society***

2006 **Organizer, Frontiers in Myogenesis Meeting, *Society for Muscle Biology***

2004 **Organizer, College of Medicine/HHMI Seminar Series**
 Rosela Tupler, John Faulkner, Hannele Ruohola-Baker, Jeffrey Molkentin, James Ervasti, Gregory Cox

2003 **Organizer, College of Medicine/HHMI Seminar Series**
 David J. Glass, Stuart Kornfeld, Ulrich Mueller, Guilio Cossu, Yukio Fukuyama, Francesco Muntoni, Peter Agre, Anton Bennett and Joshua Sanes

2002 **Organizer, College of Medicine/HHMI Seminar Series**
 Luis Parada, Martin Chalfie, Sriram Subramaniam, Anthony Wynshaw-Boris and Yukiko Goda

2001 **Organizer, College of Medicine/HHMI Seminar Series**
 Wolfhard Almers, Pietro DeCamilli, Brian Duling and Steven Burden

- 2000 **Organizer, College of Medicine/HHMI Seminar Series**
Morgan Sheng, Susan McConnell, Richard Scheller and Thomas Südhof
- 1999 **Organizer, College of Medicine/HHMI Symposium, *Phenotypic Analysis of Genetically Engineered Mice: Insights to Biology and Human Disease***
Sally Camper, Mario Capecchi, William Dove, Reinhard Fassler and Joseph Takahasi
- 1998 **Organizer, Carver Symposium, *The Molecular Basis of Neurogenetic Diseases***
Xandra Breakfield, Kay Davies, Kurt Fischbeck, Ulrike Heberlein, Erik Kandel, David MacLennan, Jeffrey Noebels, Mihael Polymeropoulos, Dennis Selkoe, Chris Walsh, Steve Warren and Huda Zoghbi
- 1997 **Organizer, College of Medicine Research Week, *Cancer Biology: Molecular, Genetic and Clinical Approaches***
Wen-Hwa Lee, Erkki I. Ruoslahti, Ayraham Raz, Mina J. Bissell and Carlo Croce
- 1996 **Organizer and Chair, College of Medicine/HHMI Symposium, *Cell-Extracellular Matrix Interactions in Development and Disease***
Angela Christiano, David Cheresch, Brigid Hogan, James Kramer and Louis Reichardt
- 1996 **Organizer and Chair, College of Medicine Research Week, *Neurobiology: Molecular, Genetic and Clinical Approaches***
Robert H. Brown, Antonio R. Damasio, Ted M. Dawson, Story C. Landis and Katherine Kalil
- 1992 **Chairperson and Organizer, FASEB Conference, *Calcium and Cell Function***
- 1989 **Co-Chair, FASEB Conference, *Calcium and Cell Function***

Scientific Advisory Boards & Consulting

- 2010-present **Coalition to Cure Calpain 3**
Consultant
- 2010-present **NGM Biopharmaceuticals, Inc.**
Consultant
- 2010-present **Five Prime Therapeutics, Inc.**
Consultant
- 2010-present **Eleven Biotherapeutics**
Consultant
- 2010-present **The Duchenne Research Fund**
Scientific Advisory Board
- 2010-present **Vanderbilt University**
Biomedical Science Advisory Board
- 2008-present **ARMGO Pharmaceutical, Inc.**
Scientific Advisory Board
- 2006-present **Duke NUS Graduate Medical School Singapore**
Scientific Advisory Board Committee
- 2004-present **Cure Duchenne**
Scientific Advisory Board
- 2001-2004 **MyoContract**

Teaching Activities

University of Iowa

| <u>Course Title</u> | <u>Course No.</u> | <u>Year(s)</u> | <u>Registered</u> | <u>Effort</u> |
|--------------------------------------------------------|--------------------------|-----------------------|--------------------------|----------------------|
| Human Organ Systems | 140:250 | 1996-present | 200 | 15 % |
| Medical Cell Biology | 60:116 | 1996-present | 200 | 5 % |
| Human Physiology for PA Students | 72:164 | 2002-present | 40 | 5 % |
| Survival Skills for a Research Career | 060:204 | 2000-present | 150 | 5 % |
| Mini Medical School Lecture, April 10, 2007 | n/a | 2007 | 200 | 5% |
| Neurobiology of Disease | 132:235:001 | 2006 | 25 | 5% |
| Experimental Approaches to Human Disease | 060:208 | 2001-04 | 20 | 5 % |
| Fundamental Neuroscience | 132:180 | 2000 | 20 | 5 % |
| Principles of Molecular and Cell Biology (Facilitator) | 156:201 | 2000-02 | 80 | 5 % |
| Medical Neuroscience | 72:234 | 1992 | 200 | 5 % |
| Medical Neuroscience, Course Co-Director | 72:234 | 1991 | 200 | 5 % |
| Neuroscience Seminar | 132:265 | 1990-91 | 14 | 100 % |
| Cell Biology II | 142:255 | 1990 | 15 | 30 % |
| Medical Physiology, Course Director | 72:212 | 1988-90 | 190 | 30 % |
| Membrane Seminar | 72:255 | 1984-89 | 10 | 100 % |
| Intermediate Physiology | 72:150 | 1983-84 | 235 | 15 % |
| Graduate Physiology | 72:214 | 1983-84 | 8 | 15 % |
| Medical Physiology | 72:212 | 1982-95 | 190 | 20 % |
| Structure and Function of Biological Membranes | 72:241 | 1982-92 | 10 | 100 % |
| Advanced Biomedical Studies | 50:198 | 1982 | 10 | 10 % |
| Cell Biology | 72:111 | 1981 | 10 | 10 % |

International Teaching Positions

January 2006 Masters Class in Molecular Mechanisms of Disease Glycogenetics and Neuromuscular Diseases
Nijmegen School of Molecular Life Sciences (NCMLS)
Nijmegen, The Netherlands

Graduate Students

| <u>Name and Degree</u> | <u>Current Employment Organization</u> | <u>Current Title</u> |
|----------------------------------------------|-----------------------------------------------------------------------------------------------------|-----------------------------|
| Jyothi Arikath, Ph.D. (1997-2002) | Munroe-Meyer Institute for Genetics and Rehabilitation, University of Nebraska Medical Center | Assistant Professor |
| Dimple Bansal, Ph.D. (1998-2003) | Merck Research Laboratories Boston, MA | Senior Research Scientist |
| Wei Guo, Ph.D. (1992-1995) | University of Pennsylvania, Department of Biology, Philadelphia, PA | Associate Professor |
| Christina Gurnett, M.D./Ph.D. (1992-1997) | Washington University School of Medicine, Department of Neurology, St. Louis, MO | Assistant Professor |

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|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| Scott Jay, M.D./Ph.D. (1984-1991) | Hutchison Clinic, Hutchison, KS | Cardiologist |
| Myoung-Goo Kang, Ph.D. (1998-2003) | University of Texas Medical Branch, Department of Neuroscience and Cell Bio., Galveston, TX | Assistant Professor |
| Michael Knudson, M.D./Ph.D. (1985-1992) | University of Iowa, Department of Pathology, Iowa City, IA | Associate Professor |
| Albert Leung, M.D./Ph.D. (1986-1989) | Merck Research Laboratories, Raritan, NJ | Director, Clinical Research |
| Leland Lim, M.D./Ph.D. (1993-1999) | Stanford University Medical Center and Palo Alto Veterans Administration Medical Center, Department of Neurology, Stanford, CA | Postdoctoral Fellow |
| Hongyan Liu, Ph.D. (1992-1997) | New York, NY | Homemaker |
| Peter McPherson, Ph.D. (1988-1993) | McGill University, Department of Neurology, Neurosurgery, and Anatomy and Cell Biology; Montreal Neurological Institute, Montreal, Canada | Associate Professor |
| Marlon Pragnell, Ph.D. (1990-1994) | Genzyme Corp., Framingham, MA | Senior Scientist |
| David Pepper, M.S./M.D. (1984-1986) | UCSF Fresno, Fresno, CA | Associate Clinical Professor |
| Jakob Satz, Ph.D. (1999-2007) | Jackson Laboratories, Bar Harbor, ME | Postdoctoral Fellow |
| Alan Sharp, Ph.D. (1983-1988) | Developmental Neuro-Biochemistry, Case Western Reserve University | Research Scientist |
| Bin Yang, Ph.D. (1991-1995) | Avigen, Alameda, CA | Research Scientist |

Postdoctoral Fellows

| <u>Name and Degree</u> | <u>Current Employment Organization</u> | <u>Current Title</u> |
|----------------------------------------|---------------------------------------------------------------------------------------------------|-----------------------------|
| Valerie Allamand, Ph.D. (1996-2000) | INSERM Institut de Myologie, Paris, France | Research Investigator |
| Rita Barresi, Ph.D. (1998-2006) | Muscle Immunoanalysis Unit, Newcastle upon Tyne, United Kingdom | Clinical Scientist and Head |
| Aaron Beedle, Ph.D. (2003 – 2007) | The University of Georgia, Department of Pharmaceutical and Biomedical Sciences, Athens, GA | Assistant Professor |

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|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| Daniel Beltran, Ph.D. | The University of Iowa, Department of Molecular Physiology and Biophysics, Iowa City, IA | Assistant Research Scientist |
| Oxana Beskrovanya-Ibraghimov, Ph.D. (1990-1994) | Genzyme Corporation, Framingham, MA | Scientific Director |
| Gloria Biddlecome, Ph.D. (1997-1999) | Amgen, Inc., Thousand Oaks, CA | Research Scientist II |
| Chien-Chang Chen, Ph.D. (1998-2004) | Academia Sinica, Taipei, Taiwan | Assistant Professor |
| Ronald Cohn, M.D. (1998-2001) | Johns Hopkins Children's Center, McKusick-Nathans Institute of Genetic Medicine, Baltimore, MD | Assistant Professor |
| Ramon Coral, Ph.D. (1996-1999) | Hospital de Pediatría, Mexico | Research Associate |
| Rachelle Crosbie, Ph.D. (1995-1999) | UCLA, Department of Physiological Science, Los Angeles, CA | Associate Professor |
| Michel De Waard, Ph.D. (1991-1995) | INSERM/CEA, Lab Canaux Calciques, Grenoble, France | Laboratory Director |
| Frank Duclos, Ph.D. (1994-1998) | Bristol-Myers Squibb, Princeton, NJ | Research Investigator |
| Madeleine Durbeej-Hjalt, Ph.D. (1997- 2001) | University of Lund, Department of Molecular and Cellular Biology, Lund, Sweden | Assistant Professor |
| James M. Ervasti, Ph.D. (1989-1992) | University of Minnesota, Department of Biochemistry, Molecular Biology and Biophysics, Minneapolis, MN | Professor |
| Ricardo Felix, M.D./Ph.D. (1995-1998) | Center for Research and Advanced Studies of the National Polytechnic, Department of Physiology, Biophysics and Neuroscience, Mexico | Investigator |
| Elena Gertsen, M.D. (2005-2007) | East Tennessee State University, Department of Pathology, Johnson City, TN | Resident Physician |
| Severine Groh, Ph.D. (2001-2007) | University of Iowa, Department of Internal Medicine, Iowa City, IA | Assistant Research Scientist |
| Renzhi Han, Ph.D. (2003 - 2008) | Loyola University Medical Center, Department of Cell and Molecular Physiology, Maywood, IL | Assistant Professor |
| Michael Henry, Ph.D. (1995 - 1999) | The University of Iowa, Department of Molecular Physiology and Biophysics, Iowa City, IA | Associate Professor |

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|-------------------------------------------|------------------------------------------------------------------------------------------------------|-------------------------------------|
| Kate Holt, Ph.D. (1995-2000) | KemPharm, Inc., North Liberty, IA | Vice President Business Development |
| Toshiaki Imagawa, Ph.D. (1985-1989) | Hokkaido University, Department of Chemistry, Japan | Associate Professor |
| Daniel Jung, Ph.D. (1993-1996) | Laval University, Hema-Quebec Research & Development, Quebec, Canada | Scientist/Adjunct Professor |
| Motoi Kanagawa, Ph.D. (2001-2005) | Department of Medical Genetics Osaka University Graduate School of Medicine | Assistant Professor |
| Yvonne Kobayashi, Ph.D. (2000-2004) | The University of Iowa, Department of Physiology and Biophysics, Iowa City, IA | Associate |
| Kazuhiro Kobuke (2003 - 2009) | Kinki University School of Medicine, Department of Cardiovascular Medicine, Japan | Clinical Faculty |
| Hajime Kusano, Ph.D. (2000-2005) | Pfizer Global Research & Development Nagoya Laboratories, Taketoyo, Japan | Senior Scientist |
| Connie Lebakken, Ph.D. (1997-2001) | Invitrogen Drug Discovery Solutions, Madison, WI | Senior Scientist |
| Kiichiro Matsumura, M.D. (1990-1993) | Teikyo University Medical School, Department of Neurology, Tokyo, Japan | Associate Professor |
| Daniel Michele, Ph.D. (2000-2004) | University of Michigan, Department of Molecular and Integrative Physiology, Ann Arbor, MI | Assistant Professor |
| Kay Ohlendieck, Ph.D. (1989-1991) | National University of Ireland, Maynooth, County Kildare, Ireland | Professor and Chair |
| Federica Piccolo, Ph.D. (1998-2002) | Fidia Advanced Biopolymers, Italy | Project Manager |
| Jan Parys, Ph.D. (1990-1992) | Katholieke University, Department of Physiology, Leuven, Belgium | Associate Professor |
| Steve Roberds, Ph.D. (1992-1995) | Pfizer Global Research and Development, Chesterfield, MO | Senior Principal Scientist |
| Fumiaki Saito, M.D./Ph.D. (1999-2002) | Teikyo University School of Medicine, Department of Neurology, Tokyo, Japan | Instructor and Chief Researcher |
| Yoshiaki Saito, M.D./Ph.D. (2003-2004) | Yokohama Ryoiku-Iryo Center, Department of Pediatrics and Pediatric Neurology, Yokohama, Japan | Research Scientist |
| Junshi Sakamoto, Ph.D. (1989-1991) | Kyushu Institute of Technology, Department of Biochemical Eng. and Science, Japan | Associate Professor |

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|---------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------|
| Jakob Satz, Ph.D. (2007-2009) | Jackson Laboratories, Bar Harbor, ME | Postdoctoral Fellow |
| Victoria Scott, Ph.D. (1994-1996) | Abbott Laboratories, Abbott Park, IL | Research Scientist |
| Volker Straub, M.D./Ph.D. (1995-1998) | Institute of Human Genetics, University of Newcastle upon Tyne, United Kingdom | Harold Macmillan Chair of Medicine |
| Yoshihide Sunada, M.D./Ph.D. (1993-1996) | Kawasaki Medical School, Department of Neurology, Okayama, Japan | Professor |
| Barry Timms, M.D./Ph.D. (1985-1988) | University of South Dakota, Department of Cellular and Molec. Biology, Vermillion, SD | Professor |
| Derrick Witcher, Ph.D. (1991-1995) | Eli Lilly & Company, Indianapolis, IN | Senior Scientist |
| Hiroki Yamada, M.D. (1996-1999) | Teikyo University School of Medicine, Department of Neurology, Tokyo, Japan | Assistant Professor |
| Takako Yoshida-Moriguchi (2003 - 2008) | The University of Iowa, Department of Molecular Physiology and Biophysics, Iowa City, IA | Associate |

Co-Op Exchange Students

| <u>Name and Degree</u> | <u>Partner Institution</u> | <u>Dates in Laboratory</u> |
|------------------------|-----------------------------------------|------------------------------|
| Emma Hiscutt | University of Bath | June 1997 – August 1997 |
| Sara Trewick | University of Bath | June 1997 – September 1997 |
| Anne Mullen | McMaster University | May 2002 – August 2002 |
| Chris McLaughlin | McMaster University | May 2002 – December 2002 |
| Robert Svensson | University of Bath | August 2002 – August 2003 |
| Daniel Nicholson | University of Bath | August 2003 – July 2004 |
| Jeeyoung Oh | Ewha Womans University Mokdong Hospital | September 2003 – August 2004 |
| Stephane Vassilopoulos | Joseph Fourier University | February 2005 – August 2005 |
| Viviane Muniz | Universidad de Santo Amaro | March 2006 – February 2007 |

Departmental Chair Activities (2002 – present)

Overview

The Department of Molecular Physiology and Biophysics of the Roy J. and Lucille A. Carver College of Medicine is an outstanding basic science department that makes major contributions to the college's three-part mission of teaching, research and service. The department is nationally recognized for its strength and accomplishments in research, and is renowned for its exceptional contributions to Medical School teaching. The Department of Molecular Physiology and Biophysics is comprised of a highly interactive, intellectually stimulating and productive faculty of scientists and educators. At present, the department has 16 research faculty and one full-time teaching faculty member. Faculty are recruited to the department for their independent basic science research programs; however, most faculty have a component of translational research and participate in strong clinical collaborations. The department has a strong commitment to diversity, which is evidenced by its three female faculty members, two African American faculty members and three members of Asian and Pacific Islander descent. All faculty members lead active and productive research programs that are supported by external funding. A core of seven faculty have maintained greater than 70% salary support from extramural funding since 2004. Four junior faculty have

also been very successful in obtaining extramural funding since their recruitment, covering close to 70% of their salary from extramural funding.

Faculty Recruitment

| <u>Name and Degree</u> | <u>Year Recruited</u> | <u>Previous Institution</u> |
|-------------------------|-----------------------|---------------------------------|
| Amy Lee, Ph.D. | 2008 | Emory University |
| Mike Wright, Ph.D. | 2008 | University of California, Davis |
| Charles Harata, Ph.D. | 2007 | Stanford University |
| Alessio Accardi, Ph.D. | 2007 | Brandeis University |
| Michael Henry, Ph.D. | 2003 | Millenium Pharmaceuticals, Inc. |
| Michael Anderson, Ph.D. | 2003 | The Jackson Laboratory |

Graduate Student Education

- Established the Molecular Physiology and Biophysics Graduate Student Symposium
- Established the Ramon D. Buckley Graduate Student Scholarship
- Established Paper of the Year award for a departmental graduate student with an outstanding publication

Postdoctoral Fellow Education

- Established the Departmental Postdoc Career Enhancement group
- Developed a Postdoc seminar mentoring program by faculty members
- Established the Peter A. Getting Postdoctoral Scholar Award

Undergraduate Education

- Developed the Coop Exchange Program to give undergraduate students the opportunity to carry out laboratory work

Departmental Chair Talks

Presentation at "DEO Metrics, Spring 2010" University of Iowa Department of Molecular Physiology & Biophysics Faculty Meeting, Iowa City, Iowa, May 11, 2010.

DEO Department Review/SWOT Meeting with Dean Rothman & CCOM Administration, "SWOT Analysis and Department Review" University of Iowa, Iowa City, Iowa, February 16, 2009.

"The Interview" Presentation to University of Iowa Department of Molecular Physiology & Biophysics Postdoc Career Enhancement Group, Iowa City, Iowa, November 10, 2008.

"Applying and Preparing for Faculty Positions" Presentation at the University of Iowa Department of Molecular Physiology & Biophysics Postdoc Professional Development Series, Iowa City, Iowa, November 13, 2006.

"CV and Resume Preparation" Presentation at the University of Iowa Department of Molecular Physiology & Biophysics Postdoc Professional Development Series, Iowa City, Iowa, August 14, 2006.

"Physiology and Biophysics" Presentation at the University of Iowa Carver College of Medicine (CCOM) Executive Committee Meeting, Iowa City, Iowa, September 12, 2005.

"Physiology and Biophysics" Orientation Presentation to University of Iowa Biosciences Program Students as Professor and Intern Head, Iowa City, Iowa August 19, 2004.

Financial Resource Support (Grants and Contracts)

Current Grants

| <u>Title</u> | <u>Period</u> | <u>Amount</u> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|
| Investigator, Howard Hughes Medical Institute (Renewed 9/09) | 10/01/89 – | Negotiated Annually |
| NIH/NINDS 2 U54 NS053672 Senator Paul D. Wellstone Muscular Dystrophy Cooperative Research Center “Therapeutic Strategies for Congenital and Limb-Girdle Muscular Dystrophies” (PI: KP Campbell) | 06/08/05-06/31/15 | \$1,017,766 |
| NIH/NINDS 1 RC2 NS069521-01 (GO Grant) “High-Throughput Genetic & Small-Molecule Screening for Therapeutic Modifiers” (PI: KP Campbell) | 09/30/09 - 08/31/11 | \$1,233,893 |
| NIH/NIAMS 5 R01 AR051199 “Therapeutic Potential of ϵ -sarcoglycan in the Treatment of LGMD Type 2D” (PI: KP Campbell) | 04/01/04-03/31/10 | \$218,366 |
| NIH/NIAMS 3 R01 AR051199-05S1 (R01 Supplement) “Therapeutic potential of α -sarcoglycan in the treatment of limb- girdle muscular dystrophy type 2D (LGMD-2D)” (PI: KP Campbell) | 09/23/09-09/22/10 | \$325,990 |
| Muscular Dystrophy Association “Molecular Basis of Glycosylation-Deficient Muscular Dystrophy” (PI: KP Campbell) | 01/01/10 - 12/31/12 | \$144,203/year |
| Muscular Dystrophy Association Research Development Grant “Efficacy of LARGE as a Therapeutic Strategy for Limb-Girdle Muscular Dystrophy” (PI: EP Rader; Co-PI: KP Campbell) | 01/01/08 – 12/31/10 | \$45,000/year |
| Muscular Dystrophy Association Research Development Grant “Role of Muscle Development/Regeneration in the Pathology of Dystroglycanopathy” (PI: A Beedle, Co-PI: KP Campbell) | 01/01/09 – 12/31/10 | \$60,000/year |
| Ruth L. Kruschstein NRSA Fellowship “ Mechanisms Required for Dystroglycan Posttranslational Modification” (PI: M Goddeeris, Co-PI: KP Campbell) | 01/15/09 – 01/14/12 | \$57,094/year |

| | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------|
| Myotonic Dystrophy Fellowship "The Role of Sarcolemmal Membrane Fidelity in DM Muscle Pathogenesis" (PI: J Lueck, Co-PI: KP Campbell) | 04/01/09 – 03/31/11 | \$50,000/year |
| Cardiovascular Center Institutional Research Fellowship "Roles of Dynamin 2 in Myofiber Organization and Centronuclear Myopathy" (PI: J Levy, Co-PI: KP Campbell) | 01/01/09-12/31/10 | \$47,429/year |

Physical Facilities

Office and Laboratory – Carver Biomedical Research Building, 4283 CBRB, 5000 sq. ft.

Current Personnel Supervised

| <u>Associates</u> | <u>Previous University</u> | <u>Start Date</u> | <u>Degree</u> |
|------------------------------------|--------------------------------------------|--------------------------------------|----------------------|
| Takako Yoshida-Moriguchi | The University of Tokyo | 2003 | Ph.D. |
| <u>Research Scientists</u> | <u>Previous University</u> | <u>Start Date</u> | <u>Degree</u> |
| Daniel Beltran | Universidad Autónoma de Madrid | 2004 | Ph.D. |
| Tobias Willer | University of Regensburg | 2004 | Ph.D. |
| <u>Postdoctoral Fellows</u> | <u>Previous University</u> | <u>Start Date</u> | <u>Degree</u> |
| Jessica de Greef | Leiden University | 2010 | Ph.D. |
| Matthew Goddeeris | Duke University | 2007 | Ph.D. |
| Yuji Hara | Kyoto University | 2005 | Ph.D. |
| Kei-ichiro Inamori | Kyushu University | 2006 | Ph.D. |
| Jennifer Levy | University of Pennsylvania | 2008 | Ph.D. |
| John Lueck | University of Rochester | 2008 | Ph.D. |
| Erik Rader | University of Michigan | 2006 | Ph.D. |
| Rolf Turk | Leiden University | 2005 | Ph.D. |
| <u>Research Assistants</u> | <u>Undergraduate Lab Assistants</u> | <u>Administrative Support</u> | |
| Mary Anderson | Arielle Aquino | Jill Handley Henk | |
| Robert Crawford | Andrew Crimmins | Jordan Keller | |
| Keith Garringer | Jeff Engle | Brenda McAreavy | |
| Sally Prouty | Katherine (Conley) Flynn | | |
| David Venzke | Braden Jensen | | |
| | Greg Morgensen | | |
| | Taylor Peterson | | |
| | Morgan Schneider | | |
| | Biming Wu | | |
| | Zihan Zhu | | |

Clinical and Translational Activities

| | |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1997-present | Wellstone Muscular Dystrophy Cooperative Research Center <i>Director: Kevin Campbell</i> Exploration of therapeutic strategies for the treatment of various muscular dystrophies by enabling translational research on muscular dystrophies and providing advanced diagnostic services. |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

- 1997-present **Neuropathology Meeting**
Organizers: Kevin Campbell (Molecular Physiology & Biophysics), Katherine Mathews (Pediatrics and Neurology), Steven Moore (Pathology)
 Review and discussion of recent neuromuscular disease patients seen at University of Iowa Hospitals and Clinics or muscle biopsies sent to neuropathology at the University of Iowa for analysis.
**for a more detailed description of the Neuromuscular Disease Group, please see appendix XI*
- 2000 – 2007 **Limb-Girdle Muscular Dystrophy Study**
Coordinating Center: Ohio State University
PI: Jerry R. Mendell (*Ohio State University*)
Co-PIs: Steven Moore, Kevin P. Campbell (*University of Iowa*)
Members: Katherine Mathews (*University of Iowa*), Robert C. Griggs (*University of Rochester*), Alan Pestronk (*Washington University*), Gerald Fenichel (*Vanderbilt University*), Hansel Stedmann (*University of Pennsylvania*)
Aims:
 1. Establish a registry of LGMD patients in North America with defined gene mutations for purposes of determining the incidence and natural history of specific disorders in this outbred population.
 2. Establish a cohort of LGMD patients with defined gene mutations to participate in clinical trial involving gene transfer.
 3. Define appropriate end points for clinical efficacy for clinical trials including gene transfer in LGMD.

Invited Seminars (2004-Present)

- 2004 New Directions in Biology and Disease of Skeletal Muscle, San Diego, California
 2004 University of Pennsylvania Children's Hospital, Philadelphia, Pennsylvania
 2004 Keystone Symposium on Molecular Biology and Cardiac Disease, Keystone, Colorado
 2004 Cincinnati Children's Hospital Medical Center Rachford Lecture, Cincinnati, Ohio
 2004 Ohio State University Research Day, Columbus, Ohio
 2004 University of Washington Department of Biochemistry, Seattle, Washington
 2004 University of California, San Diego, California
 2004 American Academy of Neurology Plenary Session, Frontiers in Clinical Neuroscience-Beyond the Decade of the Brain, San Francisco, California
 2004 University of Rochester, Rochester, New York
 2004 George H. Bishop Lecture Series, Washington University, St. Louis, Missouri
 2004 Howard Hughes Medical Institute Scientific Meeting, Chevy Chase, Maryland
 2004 Gordon Research Conference on Basement Membranes, Bristol, Rhode Island
 2004 Muscular Dystrophy Scientific Workshop Toward Therapeutics, Foundation to Eradicate Duchenne, Inc., La Jolla, California
 2004 43rd Annual Iowa Branch American Association for Laboratory Animal Science, Iowa City, Iowa
 2004 American Society for Matrix Biology, San Diego, California
 2004 University of Iowa Neurology Grand Rounds, Iowa City, Iowa
 2005 European Neuro Muscular Centre International Workshop on Congenital Muscular Dystrophy, Naarden, The Netherlands
 2005 Third Annual Neuromuscular Conference and EMG Workshop, London Health Sciences Centre, London, Ontario, Canada
 2005 University of Iowa Internal Medicine Grand Rounds, Iowa City, Iowa
 2005 University of Connecticut Health Center Cardiovascular Grand Rounds, Farmington, Connecticut
 2005 International Congress of Physiological Sciences, San Diego, California
 2005 University of Columbia Colleen Giblin Lecture, New York, New York
 2005 Duke CMB Symposium, Duke University, Durham, North Carolina
 2005 Mini Medical School Program, University of Iowa, Iowa City, Iowa
 2005 AFM Scientific Congress on Myology, Nantes, France
 2005 Johns Hopkins Neurology Grand Rounds, Johns Hopkins University, Baltimore, Maryland
 2005 Yale Pharmacology Lecture, Yale University, New Haven, Connecticut
 2005 Harvard Children's Hospital Orthopedic Research Seminar, Boston, Massachusetts
 2005 FASEB Summer Research Conference "Skeletal Muscle Satellite and Stem Cells," Tucson, Arizona
 2005 26th Annual David W. Smith Workshop on Malformations and Morphogenesis, The University of Iowa

2005 World Muscle Society Meeting, Iguassu Falls, Brazil
 2005 Society for Glycobiology, Boston, Massachusetts
 2005 Scripps Research Institute, San Diego, California
 2006 Masters Class in Molecular Mechanisms of Disease Glycogenetics and Neuromuscular Diseases, Nijmegen
 School of Molecular Life Sciences (NCMLS), Nijmegen, The Netherlands
 2006 Harvard Cell Biology Seminar, Boston, Massachusetts
 2006 Neuroscience Program Seminar, The University of Iowa, Iowa City, Iowa
 2006 79th Annual Japanese Pharmacological Society, Yokohama, Japan
 2006 Osaka University Seminar, Osaka, Japan
 2006 Department of Molecular Biology and Genetics Seminar, Johns Hopkins University, Baltimore, Maryland
 2006 New Directions in Biology and Disease of Skeletal Muscle Meeting, Dallas, Texas
 2006 Frontiers in Myogenesis Meeting, Callaway Gardens, Pine Mountain, Georgia
 2006 Department of Defense Military Health Research Forum, San Juan, Puerto Rico
 2006 Genetics In-Service Special Presentation, The University of Iowa, Iowa City, Iowa
 2006 Neurosurgery Research Conference, The University of Iowa, Iowa City, Iowa
 2006 XVI International Congress of Neuropathology, San Francisco, California
 2006 HHMI Science Meeting. Janelia Farm Research Campus, Ashburn, Virginia
 2006 UT Southwestern Grand Rounds, UT Southwestern, Dallas, Texas
 2006 Neuromuscular Plasticity Symposium, University of Florida, Gainesville, Florida
 2007 Keystone Symposium: Molecular Pathways in Cardiac Development and Disease, Breckenridge, Colorado
 2007 Neurosciences Seminar Series, Stanford University, Stanford, California
 2007 Presidential Lecture, The University of Iowa, Iowa City, Iowa
 2007 Mini Medical School, The University of Iowa, Iowa City, Iowa
 2007 Medical College of Wisconsin Student Choice Lecture, Milwaukee, Wisconsin
 2007 The 20th Anniversary of the DMD Gene Discovery: Impact on Muscle Biology, Disease and Therapy, Ottawa
 2007 Neurology Grand Rounds, The University of Iowa, Iowa City, Iowa
 2007 Cornell Biomedical Sciences, Neuroscience Program, and Institute of Cell and Molecular Biology
 Distinguished Lecture, Cornell University, Ithaca, New York
 2007 Genzyme Seminar, Boston, Massachusetts
 2007 Jain Foundation First Annual Dysferlin Conference, Bermuda
 2007 HHMI Scientific Meeting-Molecular Transport and Trafficking, Ashburn, Virginia
 2007 Faculty of Medicine: Perceptions of the Cell, Vancouver, British Columbia, Canada
 2007 Brain Research Centre, Vancouver, British Columbia, Canada
 2007 University of Michigan Symposium, Ann Arbor, Michigan
 2007 World Muscle Society, Giardini Naxos, Italy
 2008 ENMC Workshop on CMD, Naarden, The Netherlands
 2008 Neuromuscular Disease Seminar, Leiden, The Netherlands
 2008 Banbury Center Meeting, Cold Spring Harbor, New York
 2008 Loyola University White Lecture, Maywood, Illinois
 2008 SGH 17th Annual Scientific Meeting, Singapore
 2008 New Directions in Biology and Disease of Skeletal Muscle, New Orleans, Louisiana
 2008 International Workshop for Glycosylation Defects in Muscular Dystrophy, Charlotte, North Carolina
 2008 Sloan-Kettering Cancer Center Seminar, New York, New York
 2008 Harvard Medical School Grand Rounds, Boston, Massachusetts
 2008 Gordon Research Conference on Basement Membranes, Biddeford, Maine
 2008 Iowa Congenital Muscular Dystrophy Meeting, Iowa City, Iowa
 2008 Society for General Physiologists, Woods Hole, Massachusetts
 2008 University of Kentucky Distinguished Speaker Series, Lexington, Kentucky
 2008 4th Banbury Conference on SMA: Taking on New Complexities in SMA Biology, Cold Spring Harbor
 2008 CFA Symposium, Philadelphia, Pennsylvania
 2009 HHMI Science Meeting, Chevy Chase, Maryland
 2009 The Scripps Research Institute Bernard Field Lecture, La Jolla, California
 2009 Vanderbilt Discovery Lecture, Nashville, Tennessee
 2009 Columbia University Making Muscle in the Embryo and Adult joint meeting with Frontiers in Myogenesis,
 New York, New York
 2009 March of Dimes Prize in Developmental Biology Acceptance Lecture, Baltimore, Maryland
 2009 Novartis Institutes for BioMedical Research, Inc., Cambridge, Massachusetts
 2009 Boston Biomedical Research Institute (BBRI), Watertown, Massachusetts
 2009 CMD Therapeutic Target Conference, Atlanta, Georgia
 2009 Keynote Speaker, Society of General Physiologists, Woods Hole, Massachusetts
 2009 Society of Glycobiology, San Diego, California
 2009 49th American Society for Cell Biology Annual Meeting, San Diego, California
 2010 ENMC Workshop on Dysferlinopathy, Naarden, The Netherlands
 2010 UC Santa Barbara, Santa Barbara, California

2010 Loyola University Chicago, Chicago, Illinois
2010 Genzyme Corp., Framingham, Massachusetts
2010 University of Georgia, Athens, Georgia
2010 The Ottawa Conference on New Directions in Biology & Disease in Skeletal Muscle, Ottawa, Ontario, Canada
2010 University of Nebraska Medical Center, Omaha, Nebraska
2010 University of Minnesota, Lilliehei Heart Institute, Minneapolis, Minnesota
2010 University of Texas Health Science Center – Houston, Institute of Molecular Medicine, Houston, Texas
2010 XII International Congress on Neuromuscular Diseases, Naples, Italy
2010 University of Wisconsin, Cardiovascular Research Conference, Madison, Wisconsin
2010 American Society of Matrix Biology meeting, Charleston, South Carolina
2010 University of Texas Southwestern, Dallas, Texas
2010 Muscular Dystrophy Workshop, Charlotte, North Carolina
2010 Children’s National Medical Center, Washington, District of Columbia
2011 NGM Biopharmaceuticals, Inc., San Francisco, California
2011 UC San Diego, San Diego, California
2011 Glycobiology Symposium, San Diego, California
2011 2nd Annual SBMRI Rare Disease Symposium, San Diego, California
2011 UC Davis, Davis, California
2011 UC San Francisco, Gladstone Institute, San Francisco, California
2011 1st Chinese conference on translational research in Duchenne muscular dystrophy, Guangzhou, China
2011 The Sanford-Burnham Medical Research Institute, La Jolla, California
2011 Nationwide Children’s Hospital, The Ohio State University, Columbus, Ohio
2011 AANP Annual Meeting, Presidential Symposium, Seattle, Washington
2011 Gordon Research Conference on Collagen, New London, New Hampshire
2011 Consortium for Functional Glycomics PI Meeting, Bethesda, Maryland
2011 International Conference on Muscle Wasting 2011, Ascona, Switzerland
2011 Coalition to Cure Calpain3 LGMD2A Workshop, Santa Monica, California
2011 Kurt Ebner Discovery Lecture, University of Kansas Medical Center, Kansas City, Kansas
2011 ENMC Dystroglycan and Dystroglycanopathies Workshop, Naarden, The Netherlands

Patents

1. Title: Immunogen Conjugates and the Use Thereof in a Dihydropyridine Assay
Inventor: Kevin P. Campbell
Patent No.: 4,784,955 Patent Issue: November 15, 1988
2. Title: Dihydropyridine Receptor and Antibodies Thereto
Inventors: Kevin P. Campbell, Toshiaki Imagawa and Albert T. Leung
Patent No.: 4,912,202 Patent Issue: March 27, 1990
3. Title: Measuring Non-Dystrophin Proteins and Diagnosing Muscular Dystrophy
Inventors: Kevin P. Campbell, James M. Ervasti, Kay Ohlendieck, Mitchell G. Gaver and Steven D. Kahl
Patent No.: 5,187,063 Patent Issue: February 16, 1993
4. Title: Diagnosing Malignant Hyperthermia Susceptibility by Detection of Abnormal Proteolytic Enzyme Digestion Fragments of the Ryanodine Receptor
Inventors: Kevin P. Campbell, C. Michael Knudson, Steven D. Kahl, Charles F. Louis and James R. Mickelson
Patent No.: 5,242,801 Patent Issue: September 7, 1993
5. Title: Nucleic Acids Encoding Dystrophin-Associated Proteins
Inventors: Kevin P. Campbell, Oxana Ibraghimov-Beskrovnaya, James M. Ervasti and Cynthia J. Leveille
Patent No.: 5,260,209 Patent Issue: November 9, 1993
6. Title: Diagnosis of Autosomal Muscular Dystrophy

- Inventors: Kevin P. Campbell and Kiichiro Matsumura
Patent No.: 5,308,752 Patent Issue: May 3, 1994
7. Title: Calcium Channel Compositions and Methods
Inventors: Scott Jay, Steven B. Ellis, Michael M. Harpold and Kevin P. Campbell
Patent No.: 5,386,025 Patent Issue: January 31, 1995
 8. Title: Measuring Non-Dystrophin Proteins and Diagnosing Muscular Dystrophy
Inventors: Kevin P. Campbell, James M. Ervasti, Kay Ohlendieck, Mitchell G. Gaver and Steven D. Kahl
Patent No.: 5,413,910 Patent Issue: May 9, 1995
 9. Title: Measuring Non-Dystrophin Proteins and Diagnosing Muscular Dystrophy
Inventors: Kevin P. Campbell, James M. Ervasti, Kay Ohlendieck, Mitchell G. Gaver and Steven D. Kahl
Patent No.: 653536 Patent Issue: April 6, 1995
 10. Title: Method for Screening for Cardiomyopathy
Inventors: Kevin P. Campbell
Patent No.: 5,418,139 Patent Issue: May 23, 1995
 11. Title: Purified, Native Dystrophin
Inventors: Kevin P. Campbell, Steven D. Kahl and James M. Ervasti
Patent No.: 5,430,129 Patent Issue: July 4, 1995
 12. Title: Nucleic Acid Encoding Dystrophin-Associated Protein
Inventors: Kevin P. Campbell, Steven L. Roberds and Richard D. Anderson
Patent No.: 5,449,616 Patent Issue: September 12, 1995
 13. Title: Diagnosing Malignant Hyperthermia Susceptibility by Detection of Abnormal Proteolytic Enzyme Digestion Fragments of the Ryanodine Receptor
Inventors: Kevin P. Campbell, C. Michael Knudson, Steven D. Kahl, Charles F. Louis and James R. Mickelson
Patent No.: 5,462,857 Patent Issue: October 11, 1995
 14. Title: Immunogenic Ryanodine Derivative and Related Uses
Inventors: Kevin P. Campbell, Derrick R. Witcher, Peter McPherson, Steven D. Kahl, John D. Windass, Terence Lewis and Philip Bentley
Patent No.: 5,492,839 Patent Issue: February 20, 1996
 15. Title: β -Sarcoglycan Nucleic Acid Sequence, Deleterious Mutations and Applications
Inventors: Kevin P. Campbell, Leland Lim, Franck Duclos, Yoshihide Sunada, Jacques Beckmann, Odile Broux, Fernando M. S. Tomé, Michel Fardeau and Charles E. Jackson
Patent No.: 5,672,694 Patent Issue: September 30, 1997
 16. Title: Polyclonal and Monoclonal Antibodies Against a 43 kDa Dystrophin Associated Protein
Inventors: Kevin P. Campbell, Oxana B. Ibraghimov, James M. Ervasti and Cynthia J. Leveille
Patent No.: 5,686,073 Patent Issue: November 11, 1997
 17. Title: Recombinant Production of Mammalian Calcium Channel Gamma Subunits
Inventors: Scott D. Jay, Steven B. Ellis, Michael M. Harpold and Kevin P. Campbell
Patent No.: 5,726,035 Patent Issue: March 10, 1998
 18. Title: Methods for Detecting Primary Adhalinopathy
Inventors: Kevin P. Campbell, Steven Roberds, Yoshihide Sunada, Federica Piccolo, Marc Jeanpierre and Jean-Claude Kaplan
Patent No.: 5,733,732 Patent Issue: March 31, 1998

19. Title: δ -Sarcoglycan Nucleic Acid Sequences
Inventor: Kevin P. Campbell, Daniel Jung, Franck Duclos, Volker Straub and John McPherson
Patent No.: 5,837,537 Patent Issue: November 17, 1998
20. Title: Merosin Deficiency-Type Congenital Muscular Dystrophy
Inventors: Kevin P. Campbell, Yoshihide Sunada, Fernando M.S. Tomé, Michel Fardeau
Patent No: 5,863,743 Patent Issued: January 26, 1999
21. Title: Arenavirus Receptor and Methods of Use.
Inventors: Kevin P. Campbell, Michael Henry, Hiroki Yamada, Roger Williamson, Wei Cao, Michael Oldstone
Patent No: 6,083,911 Patent Issued: July 4, 2000
22. Title: Method for Aiding the Diagnosis of In-Frame Deletion Type Congenital Muscular Dystrophy
Inventors: Kevin P. Campbell, Valérie Allamand, Yoshihide Sunada, Voker Straub, Mustafa Salih
Patent No: 6,136,546 Patent Issue: October 30, 2000
23. Title: Pathogenesis of Cardiomyopathy
Inventors: Kevin P. Campbell, Ramon Coral, Ronald Cohn, Roger Williamson and Madeleine Durbeej
Patent No: 6,201,168 Patent Issue: March 13, 2001
24. Title: Sarcospan-Deficient Mouse as a Model for Clinical Disorders Associated with Sarcospan Mutations
Inventors: Kevin P. Campbell, Connie Lebakken, Rachelle Crosbie, Roger Williamson
Patent No: 6,207,878 Patent Issue: March 27, 2001
25. Title: δ -Sarcoglycan Nucleic Acid Sequences, Amino Acid Sequences and Applications
Inventors: Kevin P. Campbell, Daniel Jung, Franck Duclos, Volker Straub and John McPherson
Patent No: 6,211,340 Patent Issue: April 3, 2001
26. Title: Gene Replacement Therapy for Muscular Dystrophy
Inventors: Kathleen H. Holt, Franck Duclos, Leland E. Lim, Volker Straub, Beverly Davidson, Roger Williamson and Kevin P. Campbell
Patent No: 6,262,035 Patent Issue: July 17, 2001
27. Title: Receptor for Mycobacterium Leprae and Methods of Use Thereof
Inventors: Anura Rambukkana, Vincent A. Fischetti and Kevin P. Campbell
Patent No: 6,331,405 Patent Issue: December 18, 2001
28. Title: Genes Encoding Neuronal Voltage-Gated Calcium Channel γ Subunits
Inventors: Verity A. Letts, Wayne N. Frankel, Kevin P. Campbell, Ricardo Felix, Gloria Biddlecome
Patent No: 6,365,337 Patent Issue: April 2, 2002
29. Title: Evaluation of Adenocarcinoma of the Prostate and Breast Using Anti-Dystroglycan Antibodies
Inventors: Kevin P. Campbell, Michael Henry, Michael B. Cohen
Patent No: 6,379,893 Patent Issue: April 30, 2002
30. Title: Disruption of the Sarcoglycan-Sarcospan Complex in Vascular Smooth Muscle: A Novel Mechanism in the Pathogenesis of Cardiomyopathy and Muscular Dystrophy.
Inventors: Kevin P. Campbell, Roger Williamson, Ramon Coral, Ronald D. Cohn
Patent Application: August 20, 1999
31. Title: Receptor for Mycobacterium Leprae and Methods of Use Thereof
Inventors: Anura Rambukkana, Vincent A. Fischetti, Kevin P. Campbell
Patent No: 6,331,405B1 Patent Issue: December 18, 2001
32. Title: Increasing Functional Glycosylation of α -Dystroglycan in the Treatment of Muscle Degeneration.

Inventors: Kevin P. Campbell and Rita Barresi
Patent Application: June 2, 2005

Patent Application Number: 11/143,885

Bibliography

Reviews and Book Chapters

Campbell, K.P. and Shamoo, A.E. Identification of Two Intrinsic Proteins Uniquely Associated with the Terminal Cisternae of the Sarcoplasmic Reticulum. In: Calcium Binding Proteins and Calcium Function. (R.H. Wasserman, R.A. Corradino, E. Carafoli, R.H. Kretsinger, D.H. MacLennan, F.L. Siegel, eds.) North Holland Press, New York, pp. 185-187, 1977.

MacLennan, D.H. and Campbell, K.P. Structure, Function and Biosynthesis of Sarcoplasmic Reticulum Proteins. *Trends Biochem.* 4,148-151, 1979.

MacLennan, D.H., Klip, A., Reithmeier, R.A.F., Michalak, M. and Campbell, K.P. Possible Sites of Ion Flow in the Sarcoplasmic Reticulum Membrane. In: Membrane Bioenergetics (Lee, C.P., Schatz, G. and Ernster, L., eds.). Addison-Wesley Reading, Mass., pp. 255-266, 1979.

MacLennan, D.H., Reithmeier, R.A.F., Shoshan, V., Campbell, K.P., LeBel, D., Herrmann, T.R. and Shamoo, A.E. Ion Pathways in Proteins of the Sarcoplasmic Reticulum. *Ann. N.Y. Acad. Sci.* 358, 138-148, 1980.

MacLennan, D.H., Campbell, K.P. and Reithmeier, R.A.F. Calsequestrin. In: Calcium and Cell Function (W. Cheung, ed.) Academic Press, New York, Vol. IV, pp. 151-173, 1983.

MacLennan, D.H., Campbell, K.P., Takisawa, H. and Tuana, B.S. A Calmodulin-Dependent Protein Kinase System from Skeletal Muscle Sarcoplasmic Reticulum. In: Advances in Cyclic Nucleotide and Protein Phosphorylation Research. (P. Greengard, G.A. Robison, R. Paoletti and S. Nicosia, eds.) Raven Press, New York, Vol. XVII, pp. 393-401, 1984.

Campbell, K.P. Protein Components and Their Roles in Sarcoplasmic Reticulum Function. In: Sarcoplasmic Reticulum in Muscle Physiology. (M.L. Entman and W.B. Van Winkle, eds.) CRC Press, Boca Raton, Florida, Vol. I, pp. 65-99, 1986.

Campbell, K.P., Leung, A.T. and Sharp, A.H. The Biochemistry and Molecular Biology of the Dihydropyridine-Sensitive Calcium Channel. *Trends Neurosci.* 11, 425-430, 1988.

Campbell, K.P., Leung, A.T. and Imagawa, T. Structural Characterization of the Nitrendipine Receptor of the Voltage-Dependent Ca²⁺ Channel: Evidence for a 52,000 Dalton Subunit. *J Cardiovasc Pharmacol.* 12(Suppl.4), S86-S90, 1988.

Campbell, K.P., Leung, A.T., Sharp, A.H., Imagawa, T. and Kahl, S.D. Ca²⁺ Channel Antibodies: Subunit-Specific Antibodies as Probes for Structure and Function. Proceedings from the Bayer Centenary Symposium. In: The Calcium Channel: Structure, Function and Implications. (M. Morad, W. Nayler, S. Kazda, M. Schramm, eds.) Springer-Verlag Berlin Heidelberg, Germany, pp. 586-600, 1988.

Fill, M.J., Ma, J., Knudson, C.M., Imagawa, T., Campbell, K.P. and Coronado, R. Role of the Ryanodine Receptor of Skeletal Muscle in Excitation-Contraction Coupling. *Ann NY Acad Sci.* 560, 155-162, 1989.

Campbell, K.P., Sharp, A.H. and Leung, A.T. 32,000-Dalton Subunit of the 1,4-Dihydropyridine Receptor. *Ann NY Acad Sci.* 560, 251-257, 1989.

Krause, K.-H., Campbell, K.P., Welsh, M.J. and Lew, D.P. The Calcium Signal and Neutrophil Activation. *Clin Biochem.* 23, 159-166, 1990.

Campbell, K.P., Ervasti, J.M., Ohlendieck, K. and Kahl, S.D. The Dystrophin-Glycoprotein Complex: Identification and Biochemical Characterization. In: Frontiers in Muscle Research. (E. Ozawa, T. Masaki and Y. Nabeshima, eds.). Proceedings of the Uehara Memorial Foundation Symposium on Frontiers of Muscle Research, Elsevier Science Publishers International Congress Series, pp. 321-340, 1991.

McPherson, P.S. and Campbell, K.P. The Ryanodine Receptor/ Ca²⁺ Release Channel. *J Biol Chem.* 268, 13765-13768, 1993.

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