

# Ken Muneoka

Professor

Department of Veterinary Physiology and Pharmacology  
College of Veterinary Medicine and Biomedical Sciences  
Texas A&M University  
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## Research Interests:

Limb/Digit Development & Regeneration, Wound Healing, Morphogenesis

## Education:

B.A. 1976 Humboldt State University (Biology/Zoology)

Ph.D. 1983 University of California, Irvine (Developmental and Cell Biology)

*“Pattern formation in developing and regenerating limbs of the axolotl, *Ambystoma mexicanum*”* (Advisor: Susan V. Bryant)

Postdoc - 1983-1986 - Developmental Biology Center, University of California, Irvine  
(Advisor: Susan V. Bryant)

## Positions Held:

2014 – present: Professor, Department of Veterinary Physiology and Pharmacology, College of Veterinary Medicine and Biomedical Sciences, Texas A&M

2014 – present: Research Professor, Department of Cell and Molecular Biology, Tulane

2013 – 2014 Interim Director, Cell & Molecular Biology MS Graduate Program, Tulane

2006 – 2014: John L. & Mary Wright Ebaugh Chair in Science & Engineering, Tulane

1998 – 2014: Professor, Department of Cell and Molecular Biology, Tulane

2008 – 2013: Co-Director – Frontiers in Stem Cells & Regeneration, Woods Hole, MA

2009 – 2012: Director, Graduate Program, Cell & Molecular Biology, Tulane

2005: Visiting Researcher, Developmental & Cell Biology, UC Irvine

1999 – 2005: Director, Cell & Molecular Biology MS Graduate Program, Tulane

1993 – 2005: Chair, Department of Cell and Molecular Biology, Tulane

1997 – 1999: United States Army Science Board, Member (Senior Executive Service 2)

1992 – 1998: Associate Professor, Cell & Molecular Biology, Tulane

1997: Visiting Professor, Department of Biology, Sendai Univ., Tohoku, Japan

1991 – 1993: Co-Director, Interdisciplinary Graduate Program in Molecular & Cellular Biology, Tulane

1991 – 1993: Director, Graduate Program, Cell & Molecular Biology, Tulane

1990: Visiting Professor, Department of Brain and Cognitive Sciences, MIT

1986 – 1992: Assistant Professor, Department of Biology, Tulane

## Professional Organizations:

Society for Developmental Biology  
American Society for Cell Biology  
American Association for the Advancement of Science  
American Association of Anatomists

**Academic and Professional Honors:**

2011	Tulane School of Science and Engineering Outstanding Researcher Award
2010	Pioneer in Stem Cell and Regeneration Award
2009	Nominated: CityBusiness 2009 Innovator of the Year
2009	New Orleans Magazine, Person to Watch in 2009
2003	Fellow, American Association for the Advancement of Science
2000	US DoD Certificate of Appreciation, Secretary of Defense, William Cohen
1993	Marcus Singer Medal for Excellence in Regeneration Research
1983 – 1984	PHS Postdoctoral Training Grant Award - UC Irvine
1981 – 1983	PHS Predoctoral Training Grant Award - UC Irvine
1982	Best Student Paper Award - Developmental Biology, American Society of Zoologists Annual Meeting - Dallas, TX
1981	University of California Chancellors Patent Fund Award
1979	Earle C. Anthony Fellowship Award
1978	Marine Biology Lab, Embryology Course - NIH Pre-doctoral Training Grant Award Woods Hole, Massachusetts

**Administrative Experience**

Chair/Directorships:

2009 – 2012	Director, Graduate Program, Cell & Molecular Biology, Tulane University
2008 – 2009	Co-Director, Graduate Program, Cell & Molecular Biology, Tulane University
1993 – 2005	Chair, Department of Cell and Molecular Biology, Tulane University
1999 – 2005	Director, Cell & Molecular Biology MS Program, Tulane University
1991 – 1993	Director, Cell & Molecular Biology Graduate Program, Tulane University
1991 – 1993	Co-Director, Interdisciplinary Graduate Program in Molecular and Cellular Biol., Tulane Univ.

University Committees:

2012 – 2014	Newcomb-Tulane College Executive Committee
2011 – 2014	University Institutional Biosafety Committee
2008 – 2014	Nominating Committees, School of Science and Engineering
2011 – 2013	ORI initiated Scientific Misconduct: Inquiry Panel and Investigative Board
2008 – 2011	Graduate Council Committee, School of Science and Engineering
2008 – 2011	Senate Committee on Research
2004 – 2011	Senate Committee for Review of Faculty Status Decision Impasses
2004 – 2007	Newcomb College Honor Board
2006 – 2007	Strategic Planning Committee, School of Science & Engineering
2001 – 2004	Tulane University Research Day, Organizing Committee
2001 – 2003	University Senate Development Committee
2000 – 2002	University Senate Committee on Research

University Committees (continued):

2001	Principal Investigator: "Louisiana Center for Organ Regeneration", Louisiana Board of Regents Health Excellence Fund (not funded)
1999 – 2000	Strategic Planning Committee, School of Liberal Arts and Sciences
1995 – 2000	Israel Science Building Planning Committee
1998	Principal Investigator: "Undergraduate Education in Biological Sciences" Howard Hughes Medical Institute (not funded)
1996 – 1998	Alpha Epsilon Delta - Tulane Pre-Medical Honor Society - Faculty Advisor
1991 – 1997	Molecular and Cellular Biology Graduate Program - Curriculum Committee
1991 – 1994	Chair, Institutional Animal Care and Use Committee
1993	Principal Investigator: "Undergraduate Education in Biological Sciences" Howard Hughes Medical Institute (not funded)
1991 – 1993	Molecular and Cellular Biology Graduate Program Steering Committee
1991 – 1992	Molecular and Cellular Biology Strategic Planning Committee
1991 – 1992	Oncology Strategic Planning Committee
1991 – 1992	Chair, Karen Gore Endowed Chair Search Committee
1988 – 1989	Health Professions Committee
1987 – 1988	Institutional Animal Care and Use Committee, member

Departmental Committees and Activities:

1993 – 2011	Faculty Search Committees (11 as committee chair) – 9 new hires
1993 – 2005	Department Tenure and Promotions Committees (15 as committee chair)
2000	Developed the CMB 1-year MS Program (revenue generating program)
1999	Established the Erik G. Ellegaard Memorial Fund (Endowment)
1992	Chair, Graduate Studies Committee - Development of graduate curriculum

Public Service:

## National Science Foundation:

2001	Integrative Graduate Education and Research Traineeship (IGERT) review panel
1998	NSF Workshop on Amphibian Malformations - Co-Organizer, San Diego, CA
1985	NSF Workshop on Limb Regeneration, Santa Cruz, CA

## National Institutes of Health:

2011 – present	Eunice Kennedy Shriver NICHD Council Member
2011	NICHD – Scientific Vision Development Workshop
2011	NICHD – Scientific Vision Workshop on Plasticity
2010	NICHD - Developmental Biology, Genetics & Teratology Branch Expert Panel
2008 – 2010	Study Section – NICHD – Dev. Biol. Subcommittee
2008 – NIH	Study Section – AREA: Developmental Biology – ZHD1 MRG-C (15)
2007 – NIH	Study Section – Special Emphasis Panel – Regenerative Medicine
2003 – 2004	Study Section – DEV1 – Member
2002 – 2003	Study Section – CDF4 - Member
1993 – 1995	Study Section – Cell Biology and Physiology - Member
1988 – 1993	Study Section – Cell Biology and Physiology - Ad Hoc Member

Public Service (Continued):

Environmental Protection Agency:

1998 – Workshop: *Biologically based dose-response modeling for developmental toxicity*, Triangle Park, NC

1997 – Workshop: *Evaluating Amphibian Malformations*, Shenandoah National Park, VA

1996 – Workshop: *Central North America Amphibian Deformities*, Duluth, MN

Department of Defense:

2004 DARPA Workshop: *Accelerated Injury Repair* – Participant

1997 – 1999 Army Science Board, United States Department of Army, completed study entitled “*Enabling Rapid and Decisive Strategic Maneuver*”

Veterans Administration:

1998 – 2004 VA Office of Regeneration Research Programs Advisory Board

Advisory Boards:

1993 – 2005 Tulane University College Council

2000 – 2002 Research Advancement Advisory Committee, Tulane University

1995 – 1998 Newcomb Nursery School Advisory Board

Editorial Boards:

2015 – present – Regenerative Engineering and Translational Medicine, Editorial Board

2013 – present – Regeneration, Associate Editor

2013 – present – Faculty of 1000, Member

2011 – present – The Scientific World Journal, Editorial board

2004 – present – BMC Developmental Biology, Editorial board

1994 – 2000 Journal of Experimental Zoology, Division Editor, Dev. Biol. Division

1993 – 1996 Developmental Biology, Associate Editor

1992 – 1994 Journal of Experimental Zoology, Assistant Editor, Dev. Biol. Division

**Talks/Presentations/Seminars**

Symposia Talks:

2013 – “*Center for Cell and Organ Biotechnology*” Opening Ceremony – Keynote Address – Houston, TX

2013 – “*International Symposium on Development, Morphogenesis and Stem Cells*” – Taiwan Society for Stem Cell Research, Taipei, Taiwan

2013 – “*International Symposium on Wound Repair and Regeneration*” – National Cheng Kung University, Tainan, Taiwan.

2012 – “*The Molecular and Cellular Basis of Regeneration and Tissue Repair*” – University of Oxford, UK

2012 – “*18<sup>th</sup> Annual KSCHIRT Symposium*” – University of Kentucky, Lexington, KY

2011 – “*Molecular Principles of Regeneration*” – Yokohama, Japan

2011 – “*Stem cells, human reproduction and regenerative medicine*” - Bethesda, MD

2011 – “*Tulane University Research Day*” Keynote Speaker, New Orleans, LA

2010 – *UCI Developmental Biology Center 40 year celebration* - Irvine, California

2009 – *European Tissue Repair Society & Wound Healing Society* – Limoges, France

2009 – *Regeneration Project II* – Amelia Island, FL

Symposia Talks (continued):

- 2008 – *Musculoskeletal Biology and Engineering* – Gordon Conference, Andover, NH  
 2008 – *Frontiers in Stem Cell and Regeneration* – Short Course, Woods Hole, MA  
 2008 – *Understanding Aging Biomed & Bioengineering Approaches* – UCLA, Los Angeles, CA  
 2007 – *Regenerative Biosciences & Engineering* – Worcester Polytec Insti, Worcester, MA  
 2007 – *Regeneration Rehabilitation* – Walter Reed Medical Center, Washington, DC  
 2007 – *Morphogenesis and Organ Regeneration* – Symposium, Sendai, Japan  
 2005 – *Tissue Repair and Regeneration* – Gordon Conference, New London, NH  
 2005 – *New Approaches to Regeneration in Mammals* – AAA, San Diego, CA  
 2004 – *Tissue Engineering the Human Body*, Regenerate 2004, Seattle, WA  
 2003 – *10<sup>th</sup> International Symposium on Neural Regeneration*, USVA, Asilomar, CA  
 2003 – *Biocomplexity IV: Regenerative Biology and Medicine*, Bloomington, IN  
 2003 – *Regeneration Workshop*, London, England  
 2002 - *Growth and Development*, American Association of Anatomist, New Orleans, LA  
 2000 - *Biochem, Genetic & Molec Mech of Skeletal Development*, EPA, Triangle Park, NC  
 1998 – *Regeneration*, MSGSA Symposium, University of Calgary, Calgary, Canada  
 1997 – *Regeneration and Pattern Formation*, Taniguchi Symposium VIII, Hong Kong  
 1996 – *Central North America Amphibian Deformities*, EPA Workshop, Duluth, MN  
 1996 - *Marcus Singer Symposium on Regeneration*, London, England  
 1994 - *Repair and Regeneration*, FASEB Summer Conference, Saxtons River, VT  
 1993 - *Marcus Singer Symposium on Regeneration*, Irvine, California  
 1992 – *Limb Development and Regeneration*, Annual Meeting of the Middle Atlantic Reproduction and Teratology Association, Lake Harmony, PA  
 1989 – *Pattern Formation in Limb Development*, AAA, New Orleans, LA  
 1989 - *Southwest Developmental Biology Conference*, Fort Worth, TX  
 1988 - *Recent Advances in Limb Regeneration*, NATO workshop, Athens, Greece  
 1986 – *Intercalation*, American Society of Zoologist, Nashville, TN  
 1985 - *British Society for Developmental Biology*, London, England  
 1983 – *Workshop on Mammalian Regeneration*, Society for Developmental Biology, Irvine, CA  
 1983 – *West Coast Regional Developmental Biology Conference*, Pacific Grove, CA

Meeting Presentations:

- 2011 – MURI Project Review Meeting, Arlington, VA  
 2011 – Advanced Technology Applications for Combat Casualty Care, Ft. Lauderdale, FL  
 2011 – Limb Regeneration: Status Report and Clinical Challenges, New Orleans, LA  
 2011 – MURI Tulane University Site Meeting, New Orleans, LA  
 2011 – DARPA - Restorative Injury Repair (RIR), wrap-up meeting, Arlington, VA  
 2010 – DARPA - FunBio Meeting, Dana Point, CA  
 2009 – DARPA – Restorative Injury Repair (RIR), semi-annual meeting, Scottsdale, AZ  
 2009 – DARPA – Restorative Injury Repair (RIR), semi-annual meeting, San Antonio, TX  
 2008 – DARPA – Restorative Injury Repair (RIR), Phase II kickoff, Charlottesville, VA  
 2007 – DARPA – Restorative Injury Repair (RIR), semi-annual meeting, New Orleans, LA  
 2007 – DARPA – Restorative Injury Repair (RIR), annual meeting, Jackson Hole, WY  
 2006 – DARPA – Restorative Injury Repair (RIR), semi-annual meeting, San Antonio, TX  
 2006 – DARPA – Restorative Injury Repair (RIR), kickoff meeting, Keystone, CO  
 1998 – 6th Internat'l Conference on Limb Development and Regeneration, Sun Valley, ID  
 1996 – 5th International Conference on Limb Development and Regeneration, York, England  
 1993 – Workshop on Limb Development and Regeneration, Waveland, MS

Meeting Presentations (continued):

- 1992 – 4th International Conference on Limb Development and Regeneration, Asilomar, CA
- 1991 – Workshop on Limb Development and Regeneration, Idlewilde, CA
- 1990 – Workshop on Limb Development and Regeneration, Dauphin Island, AL
- 1989 – Workshop on Limb Development and Regeneration, Oceanside, CA
- 1988 – Workshop on Limb Development and Regeneration, Santa Fe, NM
- 1985 – American Society of Zoologist Annual Meeting, Denver, CO
- 1983 – 4th Biennial Forum on Regeneration, Urbana, IL
- 1982 – American Society of Zoologists Annual Meeting - Dallas, TX

Invited Seminars:

- 2014 – Mars Symbioscience Scientific Advisory Board, German Town, MD
- 2013 – Department of Veterinary Physiology and Pharmacology, Texas A&M, College Station, TX
- 2011 – Department of Molecular Developmental Biology, Kyoto University, Japan
- 2011 – Department of Biology, Southeastern Louisiana University, Hammond, LA
- 2011 – Department of Orthopaedics, Tulane School of Medicine, New Orleans, LA
- 2011 – Department of Biochemistry and Molecular Biology, LSUHSC, New Orleans, LA
- 2010 – Department of Cell and Molecular Biology, Tulane University, New Orleans, LA
- 2010 – Stem cell institute, University of Minnesota, Minneapolis, MN
- 2009 – Department of Developmental and Cell Biology, University of California, Irvine
- 2009 – Department of Biology, Tohoku University, Sendai, Japan
- 2009 – Gene Therapy Center, Tulane University, New Orleans, LA
- 2009 – Pennington Biomedical Research Center, New Orleans, LA
- 2008 – Department of Zoology, University of Florida, Gainesville, FL
- 2006 – Department of Biology, University of Kentucky, Lexington KY
- 2006 – Department of Biology, Sogang University, Seoul, South Korea
- 2006 – Department of Biology, Pohang University, Pohang, South Korea
- 2006 – McGowan Institute for Regenerative Medicine, Pittsburg, PA
- 2006 – University of Connecticut Health Center, Farmington, CT
- 2005 – Department of Biology, University of Auckland, Auckland, New Zealand
- 2005 – Department of Biology, University of Miami, Coral Gables, FL
- 2004 – Department of Physiology, Tulane Health Sciences Center, New Orleans, LA
- 2003 – Gene Therapy Center, LSU Health Sciences Center, New Orleans, LA
- 2003 – University of Connecticut Health Center, Farmington, CT
- 2001 – Department of Cell Biology and Anatomy, LSU Medical Center New Orleans, LA
- 1998 – Department of Biology, Tohoku University, Sendai Japan
- 1997 – Loyola University, Department of Biology, New Orleans, LA
- 1997 – Tulane Medical School, Department of Anatomy, New Orleans, LA
- 1997 – Tokyo Medical and Dental University, Tokyo Japan
- 1997 – Department of Biology, Tohoku University, Sendai Japan
- 1997 – Department of Biological Science & Technology, Tokushima Univ., Tokushima, Japan
- 1997 – Asamushi Marine Biology Lab, Asamushi, Japan
- 1995 – Southwestern Medical Center, Department of Developmental Biology, Dallas TX
- 1995 – Mount Sinai Medical Center, Brookdale Ctr. for Molecular Biology, New York, NY
- 1994 – Children's Hospital, University of Cincinnati College of Medicine, Cincinnati, OH
- 1994 – Department of Physiology, Tulane Medical School, New Orleans, LA
- 1993 – Department of Biochemistry, Tulane Medical School, New Orleans, LA
- 1991 – Department of Pharmacology, Tulane Medical School, New Orleans, LA

Invited Seminars (continued):

1990 – Department of Genetics, Harvard School of Medicine, Boston, MA  
1990 – Department of Biology, Texas Christian University, Dallas, TX  
1990 – Department of Biology, University of Houston, Houston, TX  
1989 – The Monsanto Company, St. Louis, MO  
1986 – Department of Biology, Emory University, Atlanta, GA  
1986 – Worcester Institute of Experimental Biology, Worcester, MA  
1986 – Department of Biology, University of Houston, Houston, TX  
1985 – Department of Biology, University of Nevada at Reno, Reno, NV  
1983 – Department of Biology California State University at Chico, Chico, CA  
1981 – National Institute of Genetics, Mishima, Japan

**Teaching Experience**

Undergraduate Lecture Courses:

Cell and Molecular Biology (1986-1990); Cell Biology (1991-1998); General Biology (1995);  
Embryology (1995-2011)

Graduate Lecture Courses:

Advanced Cell and Developmental Biology I & II (1987-2011, team taught); Pattern Formation  
(1987); Mammalian Development (1987-1989); Developmental Neurobiology (1988, team  
taught); Growth Factors and Oncogenes (1989); Amphibian Development (1989, team  
taught)

Lectures in other courses:

Medical Embryology (1990-2002); Methods in Neurobiology (1991-1999)

Lab Courses:

Cell Biology Lab (1993-1994); Embryology Lab (1995-2006); Embryology Service Learning  
(2000-2004)

International Courses:

Rehabilitative and Regenerative Medicine for Minority Health and Health Disparities: a Frontiers  
Advanced Training Course, Lecturer, Howard University, Washington DC, 2013  
Frontiers in Stem Cells and Regeneration, Lecturer (Woods Hole Short Course, 2008-2013)  
Frontiers in Stem Cells and Regeneration, Co-Director, (Woods Hole Short Course, 2009-2012)  
Regeneration Training Course, Lecturer (Natl. Institute for Basic Biology, Okazaki, Japan, 2011)

Directed Undergraduate Student Research:

Eric Patz, Bill Basco, Josephine Hooten, David Cline, Angela Distefano, Richard Tepper, Gwyn  
Iler, Alex Yang, Vic Songbandith, Bill Bond, Scott Baron, John Sullivan, Ross  
Klingsberg, Stephen Bennett, Hoang Tonthat, Mara Tache, Cat-Tien Vo, Chris Skoog,  
Ceatrice Williams, Meseret Teferra, Joseph Imsais, Mohammad Taher Dehkhoda, Brock  
Brown, William Imsais, Kate Zibilich, Sandhya Rai, Michelle Kirian, Ann Azcuy, Natalie  
Mahieu, Mario Alfaro, Bryan Brewer, Amy Asawachaicharn, Katinka Vigh, Susana  
Escudero, Jennifer Simkin, Edward Lam, Robert Hayward, Mediha Ahmad, Anabelle  
Pardi, Rachel Regn, Scott Jennings, Patrick Yong Kim, Eun-Chee Lee, Amy Corcoran,  
Wan-Ching Wu, Sara Van Dam, Nicole Broel-Mendelson, Cavin Caviness, Christopher  
Rubadue, Michael Alper, Taejun Park, Carrie Malcolm, Shyam Sathyamoorthi,

Directed Undergraduate Student Research (continued):

Mimi Pham, Zachariah Walker, Alex Pham, Lamia Abisamra, Anna Tien, Jane Ball, Dandreas Williams, Darren Abbas, Danielle Fassler, Jared Grossman, Lynn Nhi Nguyen, Siobhan O'Connell, Betsy Bateman, Andres Hughes, John Korona, Maegan Pela, Catherine Tucker, Stephen Lee, Mickey Hafertepe, Tori Novak, Kristine Gu, Greg Maggio, Connor Dolan, Melissa Chiu, Hira Sohail, Alexander Cammack, Brandon Kaplan, Teresa Palkowski, Prudhvi Mandava, Darren Cheng, Louis Taylor, Ashlyn McRae, Alexandra Elliot, Sarah Lohmeier, Tracy Goodbe, John Gao, Ashley Richardson, Rebecca Lichtler, Paulina Ketcham, Christina Freiberger, Britta Peterson, Austin Boese, Yonah Levy, Michael Krumholz, Andre Florea

Directed Undergraduate Honor's Theses:

William Basco, S'88; Richard Tepper, S'90; William Bond, S'91; Mara Tache, S'93; Mohammad Taher Dehkoda, S'95; Joseph Imsais, S'96; William Imsais, S'98; Amy Asawachaicharn, S'03; Katinka Vigh, S'04; Jennifer Simkin S'06; Robert Hayward, S'07; Carrie Malcolm, S'10; Shyam Sathyamoorthi F'11; Darren Abbas S'13, Conner Dolan S'14, Alexander Cammack, S'14

Teaching Awards:

Newcomb College Mortar Board Excellence in Teaching

Supervised Graduate Research:

- Dr. Christopher Trevino, Ph.D., 1991  
*"Growth regulation during mouse limb development"* (MD/PhD, Director EMS, St. Elizabeth Hospital, Gonzales, LA)
- Dr. Changping Shi, Ph.D., Biology, Summer 1991  
*"Studies of mitogenic and morphogenic signals during mouse limb development"*  
(Founder/CEO, Molecular Cloning Laboratories, San Francisco, CA)
- Dr. Rosalie Anderson, Biology, Ph.D. 1992  
*"Characterization of posterior signaling mechanisms of cultured mouse limb bud cells"*  
(Associate Professor, Loyola University, New Orleans, LA)
- Mr. Michael Landry, Cell and Molecular Biology, MS, 1994  
*"Supernumerary digit inducing activity of extracellular matrix in the developing avian wing bud"* (MD, Department of Pediatrics, Tulane University Health Science Center)
- Dr. Gail Taylor, M.S., Neurosciences Program, Ph.D. 1995  
*"Induced regeneration and gene expression in the chick limb bud"* (MBRS-RISE Assistant Program Director, UT San Antonio, TX)
- Dr. Angela D. Reginelli, Interdisciplinary Prog. in Molecular & Cellular Biology, Ph.D. 1995  
*"The molecular and cellular characterization of pattern formation during limb development and regeneration"* (MD/PhD in Private Practice)
- Dr. Shaoguang Li, Biology, Ph.D. 1996  
*"The controlling mechanism of directional limb outgrowth and limb patterning at cellular and molecular levels"* (MD/PhD, Professor, Division of Hematology/Oncology, Department of Medicine, University of Massachusetts Medical School)
- Dr. Scott Schaller, Interdisciplinary Prog. in Molecular & Cellular Biology, Ph.D. 1999  
*"Role of Heparan Sulfate in morphogenetic signaling during limb development."*  
(JD/PhD, Associate with Stern Kessler Goldstein Fox, Washington, D.C.)



Supervised Graduate Research (continued):

- Dr. Jennifer Farrington, CMB Program, Ph.D. 2003  
*"cDNA microarray analysis of digit regeneration"* (Research Scientist, Associates of Cape Cod, Cape Cod, MA)
- Dr. Xiaodong Yang, CMB program, Ph.D. 2007  
*"The role of the ectoderm in mouse digit development and regeneration."* (Postdoctoral Researcher: Dr. Manoj Pillai, Department of Medicine, University of Colorado Denver, Aurora, CO.)
- Dr. Jangwoo Lee, CMB program, Ph.D. 2009  
*"SDF-1a chemotaxis in mouse digit regeneration"* (CPT, US Army, Research Microbiologist, Military Malaria Research Program, Walter Reed Army Institute of Research)
- Dr. YuanYuan Wu, CMB program, Ph.D. 2009  
*"The study of stem cell like fibroblasts in mouse digit regeneration"* (Researcher at OvaScience, Inc., Boston, MA)
- Dr. Warnakulasuriya Akash Fernando, CMB program, Ph.D. 2010  
*"Identifying cellular and molecular events during adult digit tip regeneration"* (Unknown, returned to Sri Lanka)
- Dr. Busra Duygu Özpölat, Ph.D. 2011  
*"Development and regeneration of the elbow joint in the chicken embryo"* (Postdoctoral researcher: Institut Jacques Monod, Evolution and Development of Metazoans Group, Paris, France)
- Dr. Karen Wang, Ph.D. 2013  
*"Role of NG2 expressing cells in the murine terminal phalanx regeneration"* (Postdoctoral Scientist, Boston Biomedical Inc, Boston, MA)
- Dr. Lindsay Dawson, Ph.D. 2014  
*"Chondrogenesis and BMP2-induced regeneration of the adult mouse middle phalanx (P2) post amputation"* (Postdoctoral researcher, Texas A&M University)
- Dr. Luis Marrero, Ph.D. 2014  
*"Bone marrow-derived cells contribute to multilineage reconstitution and blastema stage-specific upregulation of a transient scaffold in regenerating mouse digit tips."* (Director, LSU Health Science Center Morphology and Imaging Core, New Orleans, LA)
- Dr. Jennifer Simkin, Ph.D. 2014  
*"Oxygen signaling and inflammation as key influences on mouse digit regeneration"* (Postdoctoral researcher, University of Kentucky, Lexington, KY)
- Paula Schanes, CMB program, Tulane University, in progress
- Paulina Ketcham, Biomedical Sciences, College of Veterinary Medicine and Biomedical Sciences, Texas A&M University, in progress
- Connor Dolan, Biomedical Sciences, College of Veterinary Medicine and Biomedical Sciences, Texas A&M University, in progress

Ph.D. Committees:

- David Song, Department of Anatomy, Tulane Medical School, MD/Ph.D., 1993
- Diane Snyder, Interdisciplinary Program in Molecular and Cellular Biology, Ph.D., 1993
- Bert Coltman, Interdisciplinary Program in Molecular and Cellular Biology, Ph.D., 1996
- Andras Fanscik, Department of Cell and Molecular Biology, Ph.D. 1999
- Emel Ulupinar, LSUMC Program in Anatomy and Cell Biology, Ph.D. 1999
- Eduardo Martinez-Ceballos, Department of Cell and Molecular Biology, Ph.D., 2001

Ph.D. Committees (continued):

Sylvia Alapat, Department of Cell and Molecular Biology, Ph.D., 2001  
Christopher Stuart, Department of Cell and Molecular Biology, Ph.D., 2001  
Adam Haeberle, LSUMC Program in Anatomy and Cell Biology, Ph.D., 2002  
Shusheng Wang, Department of Cell and Molecular Biology, Ph.D., 2004  
Yiqiang Song, Department of Cell and Molecular Biology, Ph.D., 2005  
Yan Yin, Department of Cell and Molecular Biology, Ph.D., 2007  
Jing Cai, Department of Cell and Molecular Biology, Ph.D., 2007  
Cong Xing Lin, Program in Human Genetics, Tulane Medical School, Ph.D., 2008  
Fenlei He, Department of Cell and Molecular Biology, Ph.D., 2008  
Ramon Espinosa, Department of Cell and Molecular Biology, Ph.D. 2009  
Wei Xiong, Department of Cell and Molecular Biology, Ph.D., 2009  
Chantelle Ferland, Neuroscience Program, Ph.D., 2011  
Chao Liu, Department of Cell and Molecular Biology, 2014  
Cheng Sun, Department of Cell and Molecular Biology, in progress  
Wendou Ye, Department of Cell and Molecular Biology, in progress  
William Anderson, Department of Cell and Molecular Biology, in progress

Postdoctoral Research Supervised:

Dr. Christopher Trevino, 1991 – 1992, Director EMS, St. Elizabeth Hospital, Gonzales, LA  
Dr. Gerd Koenig, 1991 – 1992  
Dr. Susan Van Way, 1993 – 1994, Senior Research Associate, Department of Pediatrics and Communicable Diseases, University of Michigan Medical School, Ann Arbor, MI  
Dr. Rosalie Anderson, 1992 – 1997, Associate Professor, Loyola University, New Orleans, LA  
Dr. Valerie Ngo-Muller, 1996 – 1999, Assistant Professor, Biologie Fonctionnelle et Adaptative, Universite Paris Diderot. Paris, FR  
Dr. Bertram Coltman, 1997 – 2000, Associate Professor, Concordia University, Portland, OR  
Dr. Minoru Omi, 1998 – 2000, Assistant Professor, School of Medicine, University of Fukui, JP  
Dr. Man-Jong Han, 1998 – 2006, Research Assistant Professor, Department of Cell and Molecular Biology, Tulane University, New Orleans, LA  
Dr. Scott Schaller, 1999 – 2001, JD/PhD, Associate with Stern Kessler Goldstein Fox, Washington, DC  
Dr. Daniel Gonzalez, 2003 – 2005  
Dr. Ling Yu – 2006 – 2009, Research Assistant Professor, Department of Cell and Molecular Biology, Tulane University, New Orleans, LA  
Dr. Eric Leininger – 2007 – 2010, Independent Scientist and Consultant, New Orleans, LA  
Dr. Akash Fernando – 2010– 2011  
Dr. Jennifer Simkin – 2014 – 2015  
Dr. Mimi Sammarco - 2009 – present  
Dr. Lindsay Dawson – 2014 – present

Other Supervised Research:

Dr. Donna Hughes, DMV, Dept of Anatomy, University of Pittsburgh School of Medicine, Pittsburgh, PA (Visiting Graduate Student, 9/87)  
Dr. Robert Tompkins, Ph.D., Department of Biology, Tulane University, Sabbatical Leave, 1/88 - 6/88  
Dr. Charles Ide, Ph.D., Department of Biology, Tulane University, Sabbatical Leave, 6/88 - 12/88

Other Supervised Research (continued):

Dr. YaoQi Wang, Department of Biochemistry, Boston University, Boston, MA (Visiting Graduate Student, 1/93)

Dr. Rosalie Anderson, Ph.D., Department of Biology, Loyola University, (Post-Katrina, 2006)

Dr. Tao Li, MD/PhD, Department of Hand Surgery, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, Hubei430022, China (Visiting research scholar, 5/2014 – present).

Dr. Yingqin Liu, Ph.D. Department of Biotechnology, Guilin Medical School, Guangxi, China (Visiting research scholar, 4/2015 – present).

**Research Funding****Pending Support:**

*Single cell analysis of dedifferentiation and transdifferentiation in mammalian regeneration*, Guo-Cheng Yuan (Dana-Farber Cancer Institute), PI. US Army Research Center, WF911NF-12-R-0012-02 (7/1/2015-6/30/2017), Ken Muneoka and John Stallone, TAMU subcontract (2% effort).

This grant application is focused on developing technology for single cell transcriptome analyses during mammalian regeneration.

**Past Support:**

PI, US Army Research Center (MURI), W911NF-09-1-0305, \$6,246,794 (total), 6/1/2009-3/31/2015 (K. Muneoka plus 3 subcontracts) (20% effort).

*Frontiers in stem cells and regeneration*, Gerald Schatten, PI (Ken Muneoka, co-PI), 5T15HL074353-07, 5/1/2009-4/30/2014) (5% effort).

*Digit Regeneration in Mammals*, Ken Muneoka, P.I., DARPA, BAA-05-19, \$16,726,526 (total), 5/15/06-5/14/11, (11 subcontracts) (50% effort)

*BMP and FGF signaling in mammalian digit regeneration*, K. Muneoka, PI, NICHD, R01 HD043277, \$1,334,520 (direct), 2/1/04 – 7/31/10 (20% effort)

*Laser Microdissection Technology for BMP2 Induced Regeneration* (Equipment only), Ken Muneoka, P.I., US Army Research Center, \$150,000 (total), 6/22/2009 – 6/21/2010. Equipment grant to support *Digit Regeneration in Mammals*. (no effort)

*Genetic Control of Limb Development*, R. Kosher, P.I., NICHD, P01 HD022610, Project 1, R. Kosher, PI, K. Muneoka, co-PI, 5/1/05 – 3/31/10 (4% effort)

*Genetic Control of Limb Development*, R. Kosher, P.I., NICHD, P01 HD022610, Project 3, K. Muneoka, PI, \$766,323 (direct), 5/1/05 – 3/31/10 (15% effort)

*De novo generation of mammalian tooth from stem cells*, YiPing Chen, PI, K. Muneoka, Co-PI, NIH/NIDCR R01 DE 015123, 6/1/2003 – 5/31/2007. (8% Effort)

*Msx genes in wound healing and regeneration*, K. Muneoka, P.I., NICHD, R01- HD35245, 4/1/97 - 3/31/02

*Retinoids as morphogenetic disruptors in the environment*, K. Muneoka, Co-P.I., CCD, Univ. of Mississippi Medical Center subcontract, R04-CCR419466-01, 7/2/2000 – 7/1/2002

*North American Anuran Toxicity Assay*, K. Muneoka, PI, DOD/DTRA, 4/1/99 – 3/31/00

*Morphogenetic Disruptors in the Environment: Retinoid Signaling and Amphibian Embryos*, K. Muneoka, PI, DOD/DSWA, 10/1/99 – 7/31/00

**Past Support (continued):**

*Heart Morphogenesis*, K. Muneoka, P.I., American Heart Association, Louisiana Affiliates, 7/1/94 - 6/30/97

*Molecular basis of Cadmium toxicity*, K. Muneoka, P.I., DoD/DNA FY96 Bioenvironmental Hazards Research Program, 7/1/96-6/30/97

*Analysis of growth control in developing mouse limbs*, K. Muneoka, P.I., NICHD - R29-HD23921, 3/1/88 - 2/28/95

*Limb Development and Regeneration in Mice*, PI – K. Muneoka, The Monsanto Company, 1/1/88 - 12/31/94

*Limb Regeneration in Mammals*, PI: S.V. Bryant, UC Irvine, Co-PI: K. Muneoka, NICHD, R01-HD20662, 6/1/87 - 5/31/91.

*Experimental analysis of in vivo growth control during normal and mutant limb development in the mouse embryo*, PI – K. Muneoka, LEQSF, Subprogram A, 6/1/87 - 3/1/88

*"In vivo rescue of tumorigenic cells in the mouse embryo"*, PI – K. Muneoka, Cancer Association of Greater New Orleans, 1/1/87 - 12/31/87.

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**Publications: Supervised Research**

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**Publications: Book Reviews**

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