#### VITAE

NAME: Marshall Andersen

ADDRESS: 17419 W. 70<sup>th</sup> St. Shawnee, KS 66217

PERSONAL: DOB: 12/18/1944 Married; 4 children

## ACADEMIC DEGREES

Ph.D. in Vertebrate Morphology; University of Kansas, 1978

M.A. in Systematics and Ecology; University of Kansas, 1973

B.A. in Zoology; University of Kansas, 1967

## ADDITIONAL COURSEWORK

Completion of all coursework required for a B.S. degree in computer science at Rockhurst University, Kansas City, MO, 1987.

# PROFESSIONAL POSITIONS

Associate Professor of Biosciences, Kansas City University of Medicine and Biosciences, 2012 to present.

Professor of Biology, Rockhurst University; 1991 to 2012.

Adjunct Professor of Cell Biology and Genetics, Kansas City University of Medicine and Biosciences (KCUMB), 2005 to 2012.

Chairman, Department of Biology, Rockhurst University, Kansas City, MO; 1985-1997; 2002 to 2005.

Adjunct Professor of Physical Therapy, University of Kansas Medical Center, 1996 to 2011.

Adjunct Professor of Occupational Therapy, University of Kansas Medical Center, 1996 to 2011.

Adjunct Professor of Nurse Anesthesia, University of Kansas Medical Center, 1996 to 2011.

Associate Professor of Biology (with Tenure), Rockhurst University;

1983 to 1991.

Assistant Professor of Biology, Rockhurst University; 1980 to 1983.

Assistant Professor of Biology, Cameron State University, Lawton, OK; 1975 to 1980.

Instructor in Biology, University of Tulsa, OK; 1975 (one semester replacement).

Research Assistant in Entomology, University of Kansas; 1974.

Scientific Illustrator in Paleontology, University of Kansas; 1972.

#### SOCIETY MEMBERSHIPS

Missouri Academy of Science Editor of Missouri Academy of Science Bulletin; 1999 to 2005.

American Association for the Advancement of Science

Society of Integrative and Comparative Biology (formerly American Zoological Society)

### PUBLICATIONS

*Perspectives in Introductory Biology: Laboratory Observations and Evaluations* (7<sup>th</sup> ed.). 1990. Hunter Publ. Co.

"Inquiry Approach to Teaching Non-Majors Biology." 1984 *Biocene*, 10(1).

"Notes on Thermal Relations in *Acris crepitans*." 1983. *Bulletin of the Oklahoma Herpetological Society*, 8 (2): 48-53.

### PUBLISHED ABSTRACTS

"Muscle Cleavage in the Hindlimb of *Xenopus laevis*." 1990, *American Zoologist*, 30 (4): 75A.

"Comparative Osteology of the Archaeobatrachid Carpus." 1982, *American Zoologist*, 22 (4): 862

"Myology of a Hypothetical Ancestral Anuran Foot and Comparison with a Primitive Extant Anuran." 1978, *American Zoologist*, 18 (3): 612.

#### PAPERS PRESENTED

"Muscle Development in the Hindlimb of *Xenopus laevis*." Poster presentation at the Missouri Academy of Science annual meeting in Maryville, Spring, 2009.

"An Undergraduate Multifaceted Research Program in Developmental Biology." Conference on Undergraduate Research – Research Link 2000 Conference, 1997, University of Wisconsin, Whitewater.

"Muscle Cleavage in the Hindlimb of *Xenopus laevis*." 1990. Annual Meeting of the American Society of Zoologists, San Antonio, TX.

"Teaching Biomechanics in the Anatomy Lab." 1990. Annual meeting of the Assoc. of Midwest College Biology Teachers, Indiana State University.

"Comparative Osteology of the Archaeobatrachid Carpus." 1982. Annual meeting of the American Society of Zoologists, Louisville, KY.

"Myology of a Hypothetical Ancestral Foot and Comparison with a Primitive Extant Anuran." 1978. Annual meeting of the American Society of Zoologists, Richmond, VA.

"Thermoregulation in *Acris crepitans*." 1977. Oklahoma Academy of Science annual meeting, Northeastern State University (Tahlequah).

"Myological Studies on the Relationship between the Anuran Prepollex and Prehallux." 1977. Society for the Study of Amphibians and Reptiles annual meeting, University of Kansas.

Course Name	Total Times Taught	Times Taught at Rockhurst
Human Gross Anatomy with cadaver dissection *	44	29
Neuroanatomy * (at KUMC)	22	6
Medical Histology	18	18
Embryology	41	36
Vertebrate Anatomy	45	40
Cell Biology	11	6
Pathophysiology (for nurse practitioners)*	23	23
Histology and Cell Biology * (at KCUMB)	8	0
Immunology	4	3
Human Anatomy and Physiology	25	25

COURSES TAUGHT (as of Fall, 2012) (\* = graduate courses)

Scientific Illustration	10	10
Zoology	5	0
General Biology	34	24
Herpetology	2	0
Medical Genetics* (at KCUMB)	8	0

## **RESEARCH INTERESTS**

My current research interests are in the areas of comparative and functional anatomy of the limb musculoskeletal system in amphibians, reptiles, and birds. I am also working on limb morphogenesis in these groups. Ultimately, I would like to expand my work to include the developmental and genetic mechanisms involved in the ontogeny of the appendicular musculoskeletal systems. Part of my work has been funded by in-house grants from Rockhurst University and by non-financial support from the Kansas University Museum of Natural History.

# GRANTS

- Summer, 1990 Institutional grant from Rockhurst University to support research on the immunochemical changes involved in the ontogeny of the limb musculoskeletal system in *Xenopus laevis*. \$3,000.
- Summer, 1986 Institutional grant from Rockhurst University to support the writing of a laboratory manual with a functional approach to vertebrate anatomy. \$3,000.
- Summer, 1983 Institutional grant from Rockhurst University to support A project involving the reconstruction of the structural changes that occur during the embryological development of limbs in the common laboratory frog, *Xenopus laevis*. \$2,800.
- Summer, 1983 Kansas City Regional Council for Higher Education grant to write a study guide for an inquiry-based non-majors general biology course, \$500.

#### TEACHING AWARDS

- 2004: Professor of the Year Award (Physical Therapy)
- 2001: Research College of Nursing Freshman Teacher of the Year
- 1998: Alpha Sigma Nu Distinguished Teaching Award
- 1997: Zeta Tau Alpha Outstanding Faculty Award.
- 1991: Sears Roebuck Excellence in Teaching Award. (now = Teaching Excellence Award)
- 1989: Research College of Nursing Freshman Teacher of the Year.
- 1988: Rockhurst University Teacher of the Year Award
- 1988: Research College of Nursing Freshman Teacher of the Year.