

## CURRICULUM VITAE

### NAME:

Gregory M. Rajala

### OFFICE ADDRESS:

Department of Biomedical Sciences  
Marquette University  
561 N. 15<sup>th</sup> Street  
Milwaukee, WI 53233  
(414) 288-6561

### EDUCATION:

Doctor of Philosophy (Anatomy)  
Department of Anatomy, Medical College of  
Wisconsin, Milwaukee, Wisconsin May, 1976.  
Dissertation entitled: "Developmental Cardiovascular  
Physiology of the Normal and Teratogen Treated Chick  
Embryo."

Bachelor of Arts (Biology), University of Colorado,  
Boulder, Colorado, May, 1972

Bachelor of Science in Physical Therapy  
Marquette University, Milwaukee, Wisconsin,  
August, 1988.

### ACADEMIC APPOINTMENTS:

#### Associate Professor:

Department of Biomedical Sciences  
College of Health Sciences  
Marquette University  
Milwaukee, Wisconsin 53233  
1985 - Present

#### Associate Professor

Department of Physical Therapy  
College of Health Sciences  
Marquette University  
Milwaukee, WI 53233  
1988 - Present

#### Assistant Professor:

Department of Basic Sciences  
Marquette University  
Milwaukee, WI 53233  
1979 - 1985

#### Assistant Adjunct Professor:

Department of Cellular Biology, Neurobiology and Anatomy  
Medical College of Wisconsin  
Milwaukee, Wisconsin 53226  
1982 - Present

#### Assistant Professor:

Department of Anatomy  
Hahnemann Medical College  
Philadelphia, Pennsylvania 19102  
1978 - 1979

Senior Instructor: Department of Anatomy  
Hahnemann Medical College  
Philadelphia, Pennsylvania 19102  
1976 - 1978

Instructor of Anatomy: Radiologic Technician Training Program  
Department of Radiology  
Columbia Hospital  
Milwaukee, Wisconsin 53211  
1973 - 1976

Graduate Teaching Assistant: Department of Anatomy  
Medical College of Wisconsin  
Milwaukee, Wisconsin 53226  
1973 - 1976

MEMBERSHIPS: American Association of Anatomists  
1978 - Present

Teratology Society  
1977 - 1992

TEACHING EXPERIENCE:

Marquette University: Human Gross Anatomy (BISC 4130), 5 credits, fall semester, Physician Assistant and Physical Therapy students; Course Director 1997-present

Gross Anatomy (BISC 7515/7516), 3 credits each module, spring semester, Dental students; Course Director 1995-present

General Pathology (BISC 3150), 3 credits, spring semester, Physician Assistant and Physical Therapy students; guest lecturer, Bone Pathology; 2008-present

Continuing Education, Gross Dissection and Kinesiology of the Extremities, summer, anatomy section, 6 hrs lecture, 13 hrs lab; 1989-present

Continuing Education, Treatment of Bowel, Bladder and Pelvic Disorders, summer, anatomy section, 3 hrs lecture, 1 hr lab; 2005-present

Human Gross Anatomy, 4 credits, Physical Therapy students; Course Director 1983-1997

Gross Anatomy, 6 credits, Dental students, participating faculty, 1979-1983

Human Anatomy, 3 credits, Nursing students, participating faculty 1979-1983; Course Director 1984-1994

Head and Neck Anatomy, 1 credit, Dental Hygiene students; Course Director 1979-1993

Neuroanatomy, 1.5 credits, Dental students, participating faculty 1979-1985

Human Development, 1.5 credits, Dental students, participating faculty 1985-1996

Medical College of Wisconsin:

Gross Anatomy, Medical students, guest lecturer and lab 1982-2007

Basic Sciences Lecture Series, Dept of Otolaryngology Residency Program, guest lecturer 1989-1997

Hahnemann Medical College:

Gross Anatomy, Medical students, participating faculty 1976-1979

Neuroanatomy, Medical students, participating faculty 1976-1979

Human Development, Medical students, participating faculty 1976-1979

CLINICAL PRACTICE:

Wisconsin Physical Therapy License No. 3623-024, 1988-present

Occupational Medical Clinics of America:

Staff Physical Therapist, Part time, Outpatient Orthopedics 1989-1991

Waukesha Memorial Hospital:

Staff Physical Therapist, Part time, Rehab and Acute, 1991-1997

Concentra Medical Clinics

Staff Physical Therapist, Part time, Outpatient Orthopedics, 1997-2008

COMMITTEE MEMBERSHIPS:

University Student Affairs Appeals Committee; 2001-2003; 2008-2010

Academic Appeals Committee, School of Dentistry, 2003-present

Recreational Sports and Helfaer Advisory Committee,  
2005-present

Advising, Promotion and Tenure and Undergraduate  
Curriculum Committees, Department of Biomedical  
Sciences

SERVICE ACTIVITIES:

Judge, Milwaukee Area Science Fair, 1980,  
1982-1999.

Judge, International Science and Engineering Fair,  
Milwaukee, Wisconsin, 1981.

OTHER SCHOLARLY ACTIVITIES:

Participant, Teratology\_Research Work  
Conferences, Department of Anatomy, Jefferson  
Medical College, Philadelphia, Pennsylvania; 1976-  
1979.

Co-Chairman, Session on Cardiac Function,  
Teratology Society Meetings, Atlantic City, New Jersey;  
June 1983.

AWARDS:

Teaching Excellence Award  
Pi Beta Phi Sorority  
Marquette University Chapter, 2009

Edward W. Carroll Award for Teaching Excellence  
College of Health Sciences  
Marquette University, 2010

PREVIOUS GRANT SUPPORT:

Principal Investigator: Myocardial Protein Analysis During Teratogenesis. 1 July 1978 - 30 June  
1979. American Heart Association/Southeastern Pennsylvania Chapter, Inc. \$4,859.

Principal Investigator: Biochemical and Physiological Analyses of Cardiateratogenesis.  
1 October 1979 - 30 September 1980. American Heart Association/National Chapter.  
\$21,890. Extended for 1 year to 30 September 1981 without additional funding.

GRADUATE STUDENTS:

Thesis Director: Timothy Weaver, M.S., Department of Anatomy, Hahnemann Medical College, June 1979. Thesis Title: "The Characterization of Hypervolemia and the Rupture of Caudal Dorsal Aortae in the Trypan Blue-Treated Chick Embryo."

Member, Dissertation Committee: Randall Kuhlmann Ph.D., Department of Anatomy, Medical College of Wisconsin, June 1981. Dissertation Title: "An Analysis of five Cardioactive Drugs and Their Effects Upon Cardiovascular Development in the Embryonic Chick."

Member, Dissertation Committee: Ray Cameron, Ph.D., Department of Anatomy, Medical College of Wisconsin, June 1982. Dissertation Title: "Dextroamphetamine-Induced Cardiovascular Malformations in the Embryonic Chick."

Member, Dissertation Committee: Michael Kuettel Ph.D., Department of Anatomy, Medical College of Wisconsin, June 1983. Dissertation Title: "Lead-Induced Vascular Malformations in the Chick: A Study of the Mechanisms of Teratogenic Action."

Member, Dissertation Committee: Kathleen Kavanagh, Ph.D., Department of Urban Education, University of Wisconsin- Milwaukee, August 1996. Dissertation Title: "A Study of Clinical Decision Making by Expert Physical Therapists."

## PUBLICATIONS:

### In Print and Press to Refereed Journals:

Rajala, G.M., J.H. Kalbfleisch and S. Kaplan 1976 Evidence that blood pressure controls heart rate in the chick embryo prior to neural control. *J. Embryol. Exp. Morph.* 36:685-695.

Rajala, G.M., M.J. Pinter and S. Kaplan 1977 Response of the quiescent heart tube to mechanical stretch in the intact chick embryo. *Develop. Biol.* 61:330-337.

Rajala, G.M. and S. Kaplan 1980 Abnormally elevated blood pressure in the trypan blue-treated chick embryos as a function of morphological stage at treatment. *Teratology* 21: 247-251.

Rajala, G.M. and S. Kaplan 1980 The formation of caudal hematomas in trypan blue-treated chick embryos as a function of morphological stage at treatment. *Teratology* 21:265-269.

Weaver, T.E., S. Kaplan and G.M. Rajala 1981 Vascular hypervolemia and hematoma formation in trypan blue-treated chick embryos. *Teratology* 23:403-409.

- Camreon, R.H., G.L. Kolesari and G.M. Rajala 1984 Elevated blood pressure in the embryonic chick induced by a teratogenic dose of dextroamphetamine sulfate. *Teratology* 29:87-92.
- Rajala, G.M., R.S. Kuhlmann and G.L. Kolesari 1984 The role of dysrhythmic heart function during cardiovascular teratogenesis in epinephrine-treated chick embryos. *Teratology* 30:385-392.
- Rajala, G.M., C-S. Lai, G.L. Kolesari and R.H. Cameron 1985 ESR measurement of dissolved oxygen in 4-day chick embryo blood. *Life Sciences* 36(3):291-297.
- Kolesari, G.L., H.J. Schnitzler, G.M. Rajala, R.B. Lewan and S. Kaplan 1988 The antidysrhythmic effect of metoprolol in the epinephrine-treated chick embryo. *Life Sciences* 42:1159-1163.
- Rajala, G.M., G.L. Kolesari, R.S. Kuhlmann and H.J. Schnitzler 1988 Ventricular blood pressure and cardiac output changes in metoprolol - and epinephrine - treated chick embryos. *Teratology* 38:291-296.
- Rajala, G.M. D.A. Neumann, C. Foster and R.H. Jensen 1994 Quadriceps muscle performance in male speed skaters. *Journal of Strength and Conditioning Research*. 8:48-52.

#### ABSTRACTS AND PRESENTATIONS:

- Rajala, G.M. and S. Kaplan 1974 Rumplessness, caudal hematomas and blood pressure in early chick embryos. *Teratology* 9:A33-34.
- Rajala, G.M. and S. Kaplan 1974 Blood pressure measurements in the early chick embryo. Presented from the platform at the American Association of Laboratory Animal Science Meetings, September 6, 1974, Oakbrook, Illinois.
- Rajala, G.M. and S. Kaplan 1974 Blood pressure measurement in the teratogentreated chick embryo: Detection of a basis for caudal hematomas and rumplessness. Presented from the platform at the Midwest Anatomists Association Meeting, October 13, 1974, Stritch School of Medicine, Loyola University of Chicago.
- Rajala, G.M., G.L. Kolesari and S. Kaplan 1975 Physiological basis for the formation of caudal hematomas and rumplessness in the chick embryo. Presented by demonstration at the Teratology Society Meetings, May 12, 1975, Pocono Manor, Pennsylvania. *Teratology* 11:30A.
- Rajala, G.M. and R.R. Schmidt 1978 Contractile/sarcoplasmic protein ratios during cariogenesis in normal and epinephrine-treated embryos. Presented by demonstration at the Teratology Society Meetings, June 11, 1978, Mackinac Island, Michigan. *Teratology* 17:36-37A.

- Rajala, G.M. and R.R. Schmidt 1979 Sarcoplasmic protein synthesis during normal and abnormal cardiogenesis. Presented by demonstration at the American Association of Anatomists Meetings, April, 1979, Miami, Florida.
- Weaver, T.E. and G.M. Rajala 1979 Hypervolemia and the distension of caudal blood vessels in trypan blue-treated chick embryos. *Teratology*, 19:52-53A.
- Rajala, G.M. 1980 Cardiac dysfunction in epinephrine-treated chick embryos. Presented by demonstration at the Teratology Society Meetings, June 9, 1980, Wentworth-by-the-sea, New Hampshire. *Teratology* 21:63A.
- Rajala, G.M., R.S. Kuhlmann and G.L. Kolesari 1982 Blood pressure changes in epinephrine-treated chick embryos. Presented from the platform at the Teratology Society Meetings, June 1982, French Lick, Indiana. *Teratology* 25:69A.
- Rajala, G.M., R.S. Kuhlmann and G.L. Kolesari 1983 EKG changes in epinephrine-treated chick embryos. Presented from the platform at the Teratology Society Meetings, June 1983, Atlantic City, New Jersey. *Teratology* 27:70-71A.
- Rajala, G.M., R.S. Kuhlmann and G.L. Kolesari 1984 Metoprolol inhibition of the ventricular pressor response in epinephrine-treated chick embryos. Presented by demonstration at the Teratology Society Meetings, June 1984, Boca Raton, Florida. *Teratology* 29:52-53A.
- Yuska, M.A., G.M. Rajala, D. Neumann and R.H. Jensen 1988 Quadriceps power differences between physically active and sedentary college females. Presented by demonstration at the Spring Conference of the Wisconsin Physical Therapy Association, 16 April 1988.
- Schue, G.J., K.C. Anstiss and G.M. Rajala 1989 Quadriceps power production in trained adolescent female speedskaters. Presented from the platform at the spring conference of the Wisconsin Physical Therapy Association, April 1989.
- Koch, M.R., J.M. Schifler, J.E. Rajala and G.M. Rajala 1990 Stress on the speedskater starters. Presented by demonstration at the Spring Conference of the Wisconsin Physical Therapy Association, April 1990.
- Stiles, M.M., P. Arnold, G.M. Rajala, D.A. Neumann and R.H. Jensen 1990 Quadriceps power differences between elite male speedskaters and untrained college males. Presented by demonstration at the Spring Conference of Wisconsin Physical Therapy Association, April 1990.

#### COMMUNITY ACTIVITIES:

West Allis Speedskating Club, Board of Control Member 1985-1997, President 1989-1991.

Wisconsin Speedskating Association, Voting member 1987-1997, President 1991-1993.

Volunteer Official (Timing and Drug Testing) United States Speedskating, 1992 - present.

Tosa League Baseball, Assistant Coach, 1987-1995.

North Central Little League - Girls Fastpitch Softball, Assistant Coach 1996-1998.

Milwaukee Metro League - U-16 Wauwatosa Girls Fastpitch Softball Team. Assistant Coach. 1998-2001.

Hartland Fastpitch League – Wauwatosa Women’s Fastpitch Softball Team. Assistant Coach. 1998-2000.

Marquette University - Women's Fastpitch Softball Team (Club Sport). Assistant Coach. Fall 2004 and Spring 2005 Seasons.

Wauwatosa East High School - Junior Raiders Football Program. Assistant Coach. Fall, 2005-present.