



CONTENTS

iii Masthead

- vii From the Editor's Desk: Thank you to *JRRD* reviewers *Stacieann C. Yuhasz, PhD; Johanna L. Gribble, MA*
- xi Guest Editorial: Using veterans' perspectives to enhance rehabilitation outcome measures: Value of qualitative methods Elizabeth M. Hannold, PhD; Jini M. Hanjian, PhD; Meggan M. Jordan, MA; Mary Joan Roach, PhD; Craig A. Velozo, PhD
- **xv** *JRRD* at a Glance

Scientific/Technical Articles

- 1 Comparison of nonmicroprocessor knee mechanism versus C-Leg on Prosthesis Evaluation Questionnaire, stumbles, falls, walking tests, stair descent, and knee preference Jason T. Kahle, CPO, LPO; M. Jason Highsmith, DPT, CP; Sandra L. Hubbard, PhD, OTR/L, ATP
- **15** Review of secondary physical conditions associated with lower-limb amputation and long-term prosthesis use Robert Gailey, PhD, PT; Kerry Allen, DPT; Julie Castles, DPT; Jennifer Kucharik, DPT; Mariah Roeder, DPT
- 31 Project LIFE—Learning to Improve Fitness and Function in Elders: Methods, design, and baseline characteristics of randomized trial Miriam C. Morey, PhD; Matthew J. Peterson, PhD; Carl F. Pieper, DrPH; Richard Sloane, MS; Gail M. Crowley, MSN, RN, ANP-C; Patricia Cowper, PhD; Eleanor McConnell, PhD; Hayden Bosworth, PhD; Carola Ekelund, PT; Megan Pearson, MA; Teresa Howard, AA
- **43** Department of Veterans Affairs-Medicare dual beneficiaries with stroke: Where do they get care? Yujing Shen, PhD; Patricia A. Findley, DrPH, MSW; Miriam Maney, MA, CPHQ; Leonard Pogach, MD, MBA; Stephen Crystal, PhD; Mangala Rajan, MBA; Thomas W. Findley, MD, PhD
- 53 How many people would benefit from a smart wheelchair? Richard C. Simpson, PhD, ATP; Edmund F. LoPresti, PhD; Rory A. Cooper, PhD
- 73 Curb descent testing of suspension manual wheelchairs Andrew M. Kwarciak, MS; Rory A. Cooper, PhD; Shirley G. Fitzgerald, PhD
- **85** Investigation of large transit vehicle accidents and establishing appropriate protection for wheelchair riders *Greg Shaw, PhD*
- **109** Effects of backrest positioning and gear ratio on nondisabled subjects' handcycling sprinting performance and kinematics *Arnaud Faupin, PhD; Philippe Gorce, PhD; Christophe Meyer, MS; André Thevenon, MD, PhD*

JRRD, Volume 45, Number 1, 2008

- **117** Pilot safety and feasibility study of treadmill aerobic exercise in Parkinson disease with gait impairment *Frank M. Skidmore, MD; Shawnna L. Patterson, MD, PhD; Lisa M. Shulman, MD; John D. Sorkin, MD, PhD; Richard F. Macko, MD*
- **125** Rehabilitation implications of stepper exercise technique on exertion and hip extensor muscle activation—A small exploratory study *COL Raul Marin, MD; Audrey Chang, PhD; Tamara Cyhan, RN; MAJ Phil Dinauer, MD*
- **135** Silver hydrogel urinary catheters: Evaluation of safety and efficacy in single patient with chronic spinal cord injury *Irene M. Estores, MD; Deborah Olsen, RN, MPH; Orlando Gómez-Marin, MSc, PhD*
- 141 Potential of olfactory ensheathing cells for cell-based therapy in spinal cord injury Christine Radtke, MD, PhD; Masanori Sasaki, MD, PhD; Karen L. Lankford, PhD; Peter M. Vogt, MD, PhD; Jeffery D. Kocsis, PhD
- **153** Effect of anodal and cathodal microamperage direct current electrical stimulation on injury potential and wound size in guinea pigs *Gadamali Talebi, MSc; Giti Torkaman, PhD; Mohammad Firoozabadi, PhD; Shams Shariat, PhD*
- 161 Integrated electromyogram and eye-gaze tracking cursor control system for computer users with motor disabilities *Craig A. Chin, PhD; Armando Barreto, PhD; J. Gualberto Cremades, EdD, PhD, CC-AASP; Malek Adjouadi, PhD*
- 175 Synchronous stimulation and monitoring of soleus H reflex during robotic body weight-supported ambulation in subjects with spinal cord injury Ross G. Querry, PT, PhD; Fides Pacheco, MD; Thiru Annaswamy, MD, MA; Lance Goetz, MD; Patricia K. Winchester, PT, PhD; Keith E. Tansey, MD, PhD
- **187** Dynamic monitoring of forearm muscles using one-dimensional sonomyography system *Jing-Yi Guo, BSc; Yong-Ping Zheng, PhD; Qing-Hua Huang, PhD; Xin Chen, PhD*

Back Matter

- 197 2007 Author Index
- 201 VA Fellowship Program Announcement
- 203 Guidelines for Contributors (Abbreviated Version)