

Curriculum Vitae

MARIA TERESA SCHULTHEIS, PH.D.

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I. EDUCATION

- B.S. 1991 **Rutgers University,**
New Brunswick, N.J.
Major: Biological Science
- M.A. 1993 **Temple University,**
Philadelphia, Pa.
Major: Biological Science; Concentration: Neuroscience
- Ph. D. 1998 **Drexel University,**
Philadelphia, Pa
Major: Clinical Psychology; Concentration: Neuropsychology
(Full accreditation by the American Psychological Association)
- Pre-Doctoral Internship 1997-1998 **Mount Sinai Medical Center,**
Department of Rehabilitation and Physical Medicine
New York, N.Y.
(Full accreditation by the American Psychological Association)

II. POST-DOCTORAL TRAINING

- 1998-2000 National Institute of Health (NIH) Post-Doctoral Fellow
Kessler Med. Rehabilitation Research & Educ. Corp., West Orange, NJ
University of Medicine & Dentistry of N.J., Newark, N.J
Department of Physical Medicine and Rehabilitation

- III. LICENSURE:** NJ Temporary Permit for the Private Practice of Psychology
Number: 993-05
Valid: 12/3/99 - 12/3/02

IV. PROFESSIONAL POSITIONS

- 1991-1994 **Rehabilitation Case Manager, Remed Recovery Care Centers**
Community Assistance Program, Philadelphia, PA.

- 1994-1995 **Rehabilitation Training Coordinator,** Remed Recovery Care Centers
Community Assistance Program & Community Re-Entry Services,
Philadelphia, PA.
- 1995-1997 **Assistant Program Director,** Remed Recovery Care Centers,
Community Assistance Program & Community Re-Entry Services,
Philadelphia, PA
- 1995-1996 **Psychology Intern,** Thomas Jefferson University Hospital
Department of Physical Medicine and Rehabilitation, Philadelphia, PA
- 1996-1997 **Bilingual Psychometrician/Spanish Assessment**
Thomas Jefferson University Hospital, Department of Pediatrics
Philadelphia, PA.
- 1996-1997 **Neuropsychology Intern,** University of Pennsylvania Medical Center,
Department of Neuropsychiatry, Brain Behavior Laboratory
Philadelphia, PA.
- 2000-2002 **Clinical Research Scientist,**
Kessler Medical Rehabilitation Research & Education Corporation
West Orange, NJ
Neuropsychology & Neuroscience Laboratory,
- 2002-2004 **Clinical Research Scientist, II**
Kessler Medical Rehabilitation Research & Education Corporation
Rehabilitation Engineering & Analysis Laboratory
- 2005 **Director, *Virtual Reality Research Laboratory***
Kessler Medical Rehabilitation Research & Education Corporation

V. UNIVERSITY APPOINTMENTS

- 1995-1996 **Adjunct Instructor**
Drexel University,
Department of Psychology, Philadelphia, Pa
- 1999 - 2001 **Instructor**
University of Medicine and Dentistry of NJ- NJ Medical School,
Department of Physical Medicine and Rehabilitation, Newark, NJ.
- 2001 - 2005 **Assistant Professor**
University of Medicine and Dentistry of NJ- NJ Medical School,
Department of Physical Medicine and Rehabilitation, Newark, NJ.

2005- 2009	Research Associate Professor <u>Drexel University, Philadelphia, PA</u> Department of Psychology and School of Biomedical Engineering, Sciences and Health Systems
2008- present	Director, Neuropsychology Graduate Training Department of Psychology Drexel University
2009-present	Associate Professor <u>Drexel University, Philadelphia, PA</u> Department of Psychology and School of Biomedical Engineering, Sciences and Health Systems

VI. AWARDS AND HONORS

- Temple University, 1992
Recipient of Minority Fellowship Award
- National Academy of Neuropsychology, 1996
Graduate Student Research Poster Award, Annual Convention
- Philadelphia Neuropsychology Society, 1997
Annual Outstanding Graduate Student Research Award
- Kessler Medical Rehabilitation Research & Education Corp., 2000
Chief Fellow, Post Doctoral Training Program
- Kessler Medical Rehabilitation Research & Education Corp., 2001
Annual Post-Doctoral Outstanding Research Award
- Sigma Xi, The Scientific Research Society, 2006
Elected member
- APA Division 40 (Neuropsychology), 2007
Early Career Award recipient

VII. GRANT HISTORY

Principal Investigator/ Co-Principal Investigator

1999-2000	<i>"Investigating Cognitive Impairment and Driving in Multiple Sclerosis"</i> <u>National Multiple Sclerosis Society</u> Funded: \$27,432.	Role: Co-PI
2000	<i>"Examining Driving Behavior After Return to Driving in Persons with Brain Injury"</i> <u>Charles Edison Foundation</u> Funded: \$12, 034	Role: PI

2000-2002	<i>"Virtual Reality and Driving Assessment in TBI"</i> <u>National Institutes of Health: Individual Training Award (NIH- F32)</u> Funded: \$74,612	Role: PI
2000-2003	<i>"The Use of Virtual Reality Technology for Driving Assessment Following Acquired Brain Injury"</i> <u>National Institute for Disability and Rehabilitation Research (NIDRR)</u> Funded: \$406,453	Role: PI
2002-2005	<i>"Examining the Demands of Driving in Multiple Sclerosis"</i> <u>National Multiple Sclerosis Society</u> Funded: \$357,840	Role: PI
2004-2006	<i>"Retraining Driving Skills in SCI: A VR Approach"</i> <u>State of New Jersey Commission on Spinal Cord Research</u> Funded: \$284,214	Role: PI
2007- 2011	<i>Defining virtual reality driving in traumatic brain injury"</i> <u>National Institutes of Health</u> <u>National Center for Medical Rehabilitation Research (R01)</u> Funded: \$1,216,787	Role: PI
2009- 2012	<i>Examining the relationship between MS progression and driving</i> <u>National Multiple Sclerosis Society</u> Funded: \$639,000	Role: PI
Internal Support		
2007 – 2011	Neuroengineering Major Research Initiative <i>"Brain-Machine Interface for Restoration of Sensory & Motor Function"</i> Drexel University Funded: 1,000,000	Role: Faculty
2009-present	Human Cognitive Enhancement Program Drexel University/ Drexel School of Medicine Funded: 500,000	Role: Scientific Advisor/ Co-PI
Equipment:		
2001	<i>"Virtual Reality Head Mounted Display Computer System"</i> <u>Hyde & Watson Foundation</u> Funded: \$20,000	Role: PI
2003	<i>"Rehabilitation Engineering & Analysis Equipment"</i> <u>The Charles E. and Joy C. Pettinos Foundation</u> Funded: \$4,000	Role: PI

Consultant

- 2003 - 2006 *"fNIRS in the study of episodic memory after brain injury"*
National Institutes of Health (NIH)
National Center for Medical Rehabilitation Research (R03)
PI: Joseph Ricker, Ph.D., University of Pittsburgh
- 2004 -2005 *"Hand Arm Rehabilitation Interface (HARI)"*
National Institute for Disability and Rehabilitation Research (NIDRR)
Small Business Initiative Research (SBIR) - Phase 1
PI: William Craelius, Ph.D., Rutgers University
- 2009-present *"Young Driver's Research Initiative"*
State Farm Insurance
PI: Flaura Winston, MD,PhD, Children's Hospital of Pennsylvania

VIII. GRANT REVIEW EXPERIENCE

- 2002- present **National Institute on Disability and Rehabilitation Research (NIDRR)**
- 2003- 2007 **National Institutes of Health (NIH)**
National Institute of Neurological Disorders and Stroke (NINDS)
Loan Repayment Program
- National Institute of Neurological Disorders and Stroke (NINDS)**
Udall Centers Review Group, Scientific Review Group: ZNS1 SRB-M 21
- National Institute of Diabetes, Digestive & Kidney Diseases (NIDDK)**
Scientific Review Group: ZDK1 GRB-G (J3)
- 2003-2008 **Center for Disease Control (CDC)**
National Center for Injury Prevention and Control
- 2004 **Research Grants Council (RGC) of Hong Kong**, Academic Research Awards
- 2004 **Israel Science Foundation**, Scientific Research Award
- 2005-2009 **National Multiple Sclerosis Society**, Pilot Research Awards
- 2006 **Canadian Institutes of Health Research**,
Regenerative Medicine and Nanomedicine Team Grants
- 2007 **Canterbury Medical Research Foundation, New Zealand**
- 2008 **Department of Defense**
Psychological Health and TBI Research Award

IX. PROFESSIONAL CONSULTATIONS

2002	<i>National Multiple Sclerosis Society</i> , New York, New York
2002- 2004	<i>Bethesda Rehabilitation</i> , HealthEast Medical Centers, St. Paul, MN
2002- 2004	<i>Tripler Army Medical Center</i> , Honolulu, Hawaii
2008	<i>Children's Hospital of Pennsylvania</i> , Philadelphia, PA

X. PEER REVIEWED PUBLICATIONS

1. Caplan, B. & **Schultheis**, M.T. (1998) An Interpretive Table for the Visual Discrimination Test, *Perceptual and Motor Skills*, 87,1203-1207
2. **Schultheis**, M.T., Caplan, B., Ricker, J. and Woesnner, R. (2000) Fractioning the Hooper: Development of a Multiple Choice Format. *The Clinical Neuropsychologist*, 14 (2), 196-201
3. DeLuca, J, **Schultheis**, M.T., Madigan, N, Christodoulou, C and Averill, A. (2000) Acquisition versus Retrieval Deficits in Traumatic Brain Injury: Implications for Memory Rehabilitation. *Archives of Physical Medicine and Rehabilitation*, 81,1327-1333
4. **Schultheis**, MT, Garay, E. and DeLuca, J. (2001). The influence of cognitive impairment on driving performance in multiple sclerosis, *Neurology*, 56; 1089-1094
5. **Schultheis**, M.T. & Mourant, R.R. (2001) Virtual Reality and Driving: The Road to Better Assessment of Cognitively Impaired Populations. *Presence: Teleoperators and Virtual Environments* 10:4, 436-444
6. **Schultheis**, M.T. & Rizzo, A.A. (2001) The Application of Virtual Reality Technology for Rehabilitation. *Rehabilitation Psychology*, 46, (3), 1-16
7. Myers, CE, DeLuca, J, **Schultheis** MT, Schirman, GM, Ermita, B, Diamond, BJ, Warren, SG, and Gluck, MA. (2001) Impaired Eyeblink Classical Conditioning in Individuals with Anterograde Amnesia Resulting from Anterior Communicating Artery Aneurysm. *Behavioral Neuroscience*, 115 (3), 560-570
8. **Schultheis**, M.T., Mathies, R.J., Nead, R. & DeLuca, J. (2002) Driving Behaviors after TBI: Self-Report and Motor Vehicle Records. *Journal of Head Trauma Rehabilitation*, 17; 38-47
9. Lengenfelder, J., **Schultheis**, M.T., Ali-Shihabi, T., DeLuca, J. and Mourant, R. (2002) Divided Attention and Driving: A Pilot Study Using Virtual Reality Technology. *Journal of Head Trauma Rehabilitation*, 17; 26-37
10. Rizzo, A.A., & **Schultheis**, M.T. (2002). Expanding the Boundaries of Psychology: The Application of Virtual Reality. *Psychological Inquiry*. 13, (2), 134-140.

11. **Schultheis**, M.T., Garay, E., Millis, S.R. & DeLuca, J. (2002) Motor vehicle violations and crashes in drivers with multiples sclerosis. *Archives of Physical Medicine & Rehabilitation*, 83(8):1175-1178.
12. Shawaryn, M.A., **Schultheis**, M.T., Garay, E. & DeLuca, J. (2002) Assessing Functional Status: Exploring the relationship between the Multiple Sclerosis Functional Composite and Driving. *Archives of Physical Medicine & Rehabilitation*, 83(8), 1123-1129.
13. **Schultheis**, MT, Himelstein, J.and Rizzo, AA. (2002) Virtual Reality and Neuropsychology: Upgrading the current tools. *Journal of Head Trauma Rehabilitation*, 17 (5), 378-394
14. Hillary, F., **Schultheis**, MT, Challis, B.H., Carnivale, G. ,Galski, T. DeLuca, J. (2003). Spacing of repetition improves learning and memory in moderate to severe TBI. *Journal of Clinical and Experimental Neuropsychology*, 25 (1), 49-58.
15. **Schultheis**, MT, Hillary, F. and Chute, D.L. (2003) The Neurocognitive Driving Test: Applying technology to the assessment of driving ability following brain injury. *Rehabilitation Psychology*, 275-280
16. Rizzo, A.A, **Schultheis**, MT, Kerns, K. and Mateer, C. (2004) Analysis of assets for virtual reality applications in neuropsychology. *Neuropsychological Rehabilitation*,14, 207-239
17. The Goldman Consensus Group (2005). The Goldman Consensus statement on depression on Multiple Sclerosis. *Multiple Sclerosis*, 11, 328-337.
18. Scherer, M.J., Hart, T., Kirsch, N., **Schultheis**, MT. “ (2005) Assistive technologies for cognitive disabilities” *Critical Reviews in Physical Medicine & Rehabilitation*, 17 (3), 195-215.
19. Simone, L., **Schultheis**, MT, Rebimbas, J., Millis, SR. (2006) “Head Mounted Displays for Clinical Virtual Reality Applications: Pitfalls in understanding user behavior while using technology”. *CyberPsychology and Behavior* , 9(5),591-602
20. Matheis, R., **Schultheis**, MT., Tierksy, L., DeLuca, J., Millis, S.R. and Rizzo, A. (2006) Is learning and memory in a virtual environment different? *The Clinical Neuropsychologist*, 21 (1), 146-157
21. **Schultheis**, MT, Simone, LK, Roseman, E., Nead, R., Rebimbas,J. Mourant, R. (2006). Stopping behavior in a VR driving simulator: A new clinical measure for the assessment of driving? *IEEE-Engineering in Medicine & Biological Science*, 4921-4924
22. Arentsh, P.A., Ricker, J.H. and **Schultheis**, MT. (2006) Applications of functional near infrared spectroscopy (fNIRS) to neurorehabilitation of cognitive disabilities. *The Clinical Neuropsychologist*, 21 (1), 38-57

23. **Schultheis**, MT, Rebimbas, J., Mourant, R. and Millis, SR. (2007) “Examining the usability of a virtual reality driving simulator” *Assistive Technologies*, 19, (1), 1-8
24. **Schultheis**, MT, Roseman, E., Rebimbas, J., Mourant, R., Nead, R. and Millis, SR (2007) “Determining the relationship between virtual reality driving and the cognitive demands of driving after brain injury” *Proceedings of the 2007 Driving Simulation Conference* - North America, Iowa City, IA.
25. Brenner, L., Homaifer, B., and **Schultheis**, MT (2008) “ Driving, Aging and Traumatic Brain Injury: Integrating findings from the literature” *Rehabilitation Psychology*, 53, 1, 18-27
26. Merzagora, A., Ruocco, A., Chute, D., Izzetoglu, M., Onaral, B., **Schultheis**, MT. (2008). The impact of ablated cortex on the validity and interpretation of the fNIRS signal *IEEE-Engineering in Medicine & Biological Science*, 4028-31.
27. Merzagorra, A., Izzetoglu, M., Polikar, R., Weisser, V., Onarl, B., **Schultheis**, MT Functional Near-Infrared Spectroscopy and Electroencephalography: A Multimodal Imaging Approach. Proceedings from the Human Computer Interface, 1024-27
28. **Schultheis**, MT, Weisser, V., Manning, K., Blasco, A., Ang, J (2009) “Driving characteristics among community dwelling individuals with MS” *Archive of Physical Medicine and Rehabilitation*, 90 (6), 975-981
29. **Schultheis**, MT, Weisser, V., Sestito, N., Ang, J. Elovic, E., Nead, R., Millis, SR “Examining the relationship between cognition and driving performance in multiple sclerosis” (2010) *Archive of Physical Medicine and Rehabilitation*, 91(3):465-73.
30. **Schultheis**, MT., Manning, K., Weisser, V., Ang, J., Blasco, A., Wilkinson, M. “ Vision, and driving in multiple sclerosis”(2010) *Archive of Physical Medicine and Rehabilitation*, 91(2):315-7.

XI. BOOKS, CHAPTERS AND CONFERENCE PROCEEDINGS

1. **Schultheis**, MT. (2000) Neuropsychological Tests and Testing Limits, in Lamar, M., Price, C., and Spiers, M. (Eds) in *Instructor's Manual for Introduction to Neuropsychology*, Wadsworth Publishing
2. **Schultheis**, MT and Garay, E. (2000) Technology and Rehabilitation, in Lamar, M., Price, C., and Spiers, M. (Eds). in *Instructor's Manual for Introduction to Neuropsychology*, Wadsworth Publishing.
3. Rizzo, A.A., Buckwalter, J.G., **Schultheis**, M.T., Neumann, U., Bowerly, T., Kim, L. Thieboux, M., & Chua, C. (2001). Virtual reality for persons with central nervous system dysfunction: Assessment and treatment in the Information Society for all. Proceedings of

- the Universal Access in HCI: Towards an Information Society for All, Lawrence Erlbaum: New York.
4. DeLuca, J. and **Schultheis**, MT . (2002) Neuropsychological assessment of patients who have undergone surgical repair of anterior communicating artery aneurysm, in Prigatano, G., Cullum, M.C. & Pliskin, N. (Eds). Demonstrating Utility and Cost-effectiveness in Clinical Neuropsychology, Psychology Press.
 5. Rizzo,A.A., **Schultheis**, M.T., & Rothbaum, B.O. (2002). Ethical issues for the use of virtual reality in the psychological sciences. In S. Bush & M. Drexler (Eds.), Ethical Issues in Clinical Neuropsychology. Lisse, NL: Swets & Zeitlinger Publishers, pgs. 243-279.
 6. Rizzo, A.A., Bowerly, T., Buckwalter, J.G., **Schultheis**, M.T., Matheis, R., Shahabi, C., Neumann, U. Kim, L., & Sharifzadeh, M. (2002). Virtual Environments for the Assessment of Attention and Memory Processes: The Virtual Classroom and Office. Proceedings of The 4th International Conference on Disability, Virtual Reality and Associated Technology. Veszprém, Hungary. 3-12.
 7. Harris, J.G, Tulskey, D., **Schultheis**, MT (2003). “Assessment of the Non-Native English Speaker: Assimilating History and Research Findings to Guide Clinical Practice.” In Tulskey,D., Saklofski, R., Bornstein, R., Chelune, G., Heaton, R., Ivnik, R., Ledbetter, M. and Prifitera, A. (Eds.), Clinical Interpretation of the WAIS III and WMS III, Academic Press, NY,NY.
 8. Matheis, R., **Schultheis**, MT and Rizzo, A.A. (2003) “Learning and memory in a virtual office environment” Presentation and proceedings at the 2nd International. Workshop on Virtual Rehabilitation (IWVR), New Brunswick, NJ.
 9. Rizzo, A., Pryor, L., Matheis, R., **Schultheis**, MT, Sey,.A. (2004) “Memory Assessment Using Graphics-Based and Panoramic Video Virtual Environments” Presentation and proceedings at the 5th International Conference Series on Disability, Virtual Reality and Associated Technologies (ICDVRAT), Oxford, UK
 10. Simone, LK, Simone, JA, Mitura, R., Klimchuk, D., **Schultheis**, MT (2005). “Development of a Portable Virtual Reality Driving Interface to Retrain Drivers with Spinal Cord Injury.” Presentation and proceedings of the 28th Annual Conference of the Rehabilitation Engineering Society of North America, Atlanta, Georgia
 11. **Schultheis**, MT. (2005). “Virtual driving versus real driving: The pros and cons of using a VR driving simulator in rehabilitation.” In K. Stanney (ed.) Advances in Virtual Environments Technology: Musings on Design, Evaluation, & Applications. Lawrence Erlbaum.
 12. **Schultheis**, MT & Ricker JH. (2006). Adaptation of the HVOT: Quantifying qualitative observations in visuospatial organization. In A Poreh (eds). The Quantitative Process Approach. Lisse, NL: Swets & Zeitlinger

13. **Schultheis, MT** and Rizzo, AA (2006) “ Emerging technologies in Neuropsychological Practice and Research” In Morgan, J. and Ricker, JR (eds) Handbook of Clinical Neuropsychology, Swets & Zeitlinger Publishers.
14. Utswatte, G., **Schultheis, MT**, Ricker, JR (2007) “Real and Virtual-world Tools for Measuring Function During Everyday Activities” In Mpofu, E., and Oakland, T., (eds) Assessment in Rehabilitation and Health, Allyn & Bacon
15. **Schultheis, MT.**, DeLuca, J., Chute, DL , (eds) (2009) “Handbook for the assessment of driving capacity”, Elsevier Publications
16. **Schultheis, MT** and Fleksher, C. (2009) Driving and Stroke. In Schultheis, DeLuca, and Chute (eds) “The handbook for the assessment of driving capacity” Elsevier Publisher, NY, NY
17. Fox, G., Hopewell, A., Roseman, E., and **Schultheis, MT** (2009) Driving and the Dementias. In Schultheis, DeLuca, and Chute (eds) “The handbook for the assessment of driving capacity” Elsevier Publisher, NY, NY
18. Merzagora, A., Izzetoglu, M., Poliktar, R., Weisser, V., Onaral, B., and **Schultheis, MT.** (2009) Functional Near-Infrared Spectroscopy and Electroencephalography: A Multimodal Imaging Approach. In the proceedings from the annual Human Computer Interface Conference, San Diego, CA
19. Ayaz, H., Shewokis, P., Bunce, S., **Schultheis, MT.** and Onaral, B., (2009) Assessment of Cognitive Neural Correlates for a Functional Near Infrared-based Brain Computer Interface System. In the proceedings from the annual Human Computer Interface Conference, San Diego, CA

XII. PUBLISHED ABSTRACTS

1. **Garay, M.T.** and Caplan, B. (1997). Fractionating the Hooper: Development of a Multiple Choice Format. *Archives of Clinical Neuropsychology*, 12, (4), 321-322. Presented at the 17th Annual Meeting of the National Academy of Neuropsychology.

2. **Garay, M.T.** and Caplan, B. (1997). An Interpretive Table for the Visual Discrimination Test. *Archives of Clinical Neuropsychology*, 12, 322. Presented at the 17th Annual Meeting of the National Academy of Neuropsychology.

3. **Garay, M.T.**, Hollister, J.M, Hagendoorn, M. and Gur, R. C. (1998) The Hunter-Gatherer Theory of Spatial Sex Differences Revisited. *Archives of Clinical Neuropsychology*, 13, 4. Presented at the 18th Annual Meeting of the National Academy of Neuropsychology.

4. **Schultheis**, M.T, and Chute, D.L. The Neurocognitive Driving Test. In Staplin, L., Lococo, K., Stewart, J., and Decina, L. (1999). Safe Mobility for Older People Notebook. U.S DOT/NHTSA Publication No. DOT HS 808 853. Washington, D.C. Presented at the

5. **Schultheis**, M.T. and Chute, D.L. (1999) Development of an ecologically valid, computerized, driving assessment program: The Neurocognitive Driving Test. *Archives of Clinical Neuropsychology*, Vol. 14 (8) pp. 794-795. *Archives of Clinical Neuropsychology*, 13, 4. Presented at the 19th Annual Meeting of the National Academy of Neuropsychology.

6. **Schultheis**, M.T., DeLuca, J., Madigan, N., & Christodoulou, C. (2000) Acquisition versus retrieval deficits in traumatic brain injury: Implications for memory rehabilitation. *Journal of the International Neuropsychological Society*, 6, 241. Presented at the 28th Annual Meeting of the International Neuropsychological Society.

7. **Schultheis**, M.T., DeLuca, J. & Garay, E. (2001) The influence of cognitive impairment on driving performance in multiple sclerosis, *Journal of the International Neuropsychological Society*, 7, 224. Presented at the 29th Annual Meeting of the International Neuropsychological Society.

8. Shawaryn, M., **Schulthies**, M.T., Garay, E. and DeLuca, J. (2001). Assessing functional status: The relationship between the Multiple Sclerosis Functional Composite (MFSC) and Driving. *International Journal of MS Care*, 3 (2), 25 . Presented at the 15th Annual Meeting of the Consortium of Multiple Sclerosis Centers.

9. Matheis, R.M., **Schultheis**, M.T., Nead, R., DeLuca, J. (2001). Assessing driving after TBI using multiple outcome measures. *Archives of Clinical Neuropsychology*, 16, 744. Presented at the 21st Annual Meeting of the National Academy of Neuropsychology.

10. DeLuca, J., Myers, C.E., **Schultheis**, M.T., Schnirman, G.M., Diamond, B.J., & Gluck, M.A. (2002) Impaired delay eyeblink classical conditioning after anterior communicating artery aneurysm. *Journal of the International Neuropsychological Society*, 8, 318. Presented at the 30th Annual Meeting of the International Neuropsychological Society.

11. Hillary, F., **Schultheis**, MT., Challice, B., Esposito, E. and DeLuca, J. (2002). Spacing of repetitions improves leaning and memory after moderate and severe TBI. *Journal of the International Neuropsychological Society*, 8, 310. Presented at the 30th Annual Meeting of the International Neuropsychological Society.

12. **Schultheis**, M.T, Garay, E., Millis, SR, DeLuca, J. (2002) Cognitive Impairment and MS: The relationship with driving accidents and violations, *Journal of the International Neuropsychological Society*, 8, 508. Presented at the 30th Annual Meeting of the International Neuropsychological Society.

13. Himmelstein, J., **Schultheis**, M.T., & DeLuca, J.(2002) Predicting driving ability in multiple sclerosis and healthy controls. *International Journal of MS Care*, 4, 92. Presented at the 16th Annual Meeting of the Consortium of Multiple Sclerosis Centers.

14. **Schultheis**, M.T., Garay, E., Millis, S.R. & DeLuca, J. (2002). Cognitive ability and driving in multiple sclerosis. *The Clinical Neuropsychologist*, 16, 201. Presented at the 110th Annual Meeting of the American Psychological Association.

15. **Schultheis**, M.T. (2003) Virtual Reality in the assessment of functional tasks. *Journal of the International Neuropsychological Society*, 9, (2), 155. Presented at the 31st Annual Meeting of the International Neuropsychological Society.

16. Lengenfelder, J., Al-Shihabi, T., Flinchbaugh, T., Mourant, R., DeLuca, J. and **Schultheis**, M.T. (2003) Divided attention and virtual reality driving assessment in TBI. *Journal of the International Neuropsychological Society*, 9,(2), 236. Presented at the 31st Annual Meeting of the International Neuropsychological Society.

17. Himelstein, J., Racasi, C., Mourant, R., Al-Shihabi, T, Deluca, J and **Schultheis**, M.T. (2003) Virtual Reality and neuropsychological indices of driving skills. *Journal of the International Neuropsychological Society*, 9, (2) 236. Presented at the 31st Annual Meeting of the International Neuropsychological Society. Honolulu, Hawaii

18. **Schultheis**, MT. (2003) Virtual reality and Neuropsychological Assessment. *Journal of the International Neuropsychological Society*, 9, (4) 536. Presented at the 31st Annual Meeting of the International Neuropsychological Society. Honolulu, Hawaii

19. **Schultheis**, MT, Rebimbas, J., Ni, A., Edwards, WT., DeLuca, J., and Millis, SR (2004) Driving and acquired brain injury: The cognitive correlates of speed management in a virtual environment. *Archives of Clinical Neuropsychology*, 19 (7) 905. Presented at the 24th annual meeting of the National Academy of Neuropsychology, Seattle, Washington.

20. **Schultheis**, MT., Fleksher, C., Elovic, E. Nead, R., Massler, D., and Millis, S.R. (2004). Evaluating driving in multiple sclerosis Part I: The neuropsychological correlates. *Archives of Clinical Neuropsychology*, 19 (7) 905. Presented at the 24th annual meeting of the National Academy of Neuropsychology, Seattle, Washington.

21. **Schultheis**, MT., Fleksher, C., Elovic, E. Nead, R., Massler, D., and Millis, S.R. (2004). Evaluating driving in multiple sclerosis Part II: The physical correlates. *Archives of Clinical Neuropsychology*, 19 (7) 905. Presented at the 24th annual meeting of the National Academy of Neuropsychology, Seattle, Washington.

22. **Schultheis**, MT, Fleksher, C., Ang, J., Elovic, E., Nead, R., Massler, D. and Millis, SR (October, 2005). Driving capacity in multiple sclerosis: what factors make a difference? Cognitive? Physical? Or Both?. *Archives of Physical Medicine and Rehabilitation*, 86, (9), page e3. Paper presented at the 66th Annual Assembly of the American Academy of Physical Medicine and Rehabilitation, Philadelphia PA

23. **Schultheis**, MT, Rebimbas, J., Mourant, R. and Millis, SR (October, 2005). Examining the usability of a virtual reality driving simulator. *Archives of Physical Medicine and*

Rehabilitation, 86, (9), page e12. Poster presented at the 66th Annual Assembly of the American Academy of Physical Medicine and Rehabilitation, Philadelphia, Pennsylvania.

24. **Schultheis, MT.**, Millis, SR, Flecksher, C., Elovic, E., Ang, J., Massler, D. and Nead, R. (October, 2005) Do neuropsychological test tell the full story about driving? *Archives of Clinical neuropsychology*, 20 (7) .Poster presented at the 25th annual meeting of the *National Academy of Neuropsychology*, Tampa, Fl.

25. Sestito, N., **Schultheis, MT.** (February, 2007) "Driving Behaviors in Multiple Sclerosis: Is there a difference?" *Journal of the International Neuropsychological Society*, (in press). Poster presented at the 35th Annual Meeting of the International Neuropsychological Society. Portland, Oregon.

26. Ruocco, A. C., Merzagora, A. C., Allen, S. L., **Schultheis, M. T.**, Tuscan, L., Lake, T., Irani, F., Ayaz, H., Onaral, B., & Chute, D. L. (2007). fNIRS measurement of cerebral blood flow in a subject with unilateral lesion of the left frontal lobe. *The Canadian Journal of Neurological Sciences*, 34, S124-125.

27. Russell KC, Scanlon JM, Arenth PM, **Schultheis MT**, Zafonte RD, Ricker JH. Near Infrared Spectroscopy and Functional Differences Following Traumatic Brain Injury. To be presented at the 115th *Annual Conference of the American Psychological Association*, August 17-20th, San Francisco CA.

28. **Schultheis, MT.**, Weisser, V., Sestito, N., Elovic, E., Ang, J., Nead, R., Millis, SR (2007). Driving and Multiple Sclerosis: What Factors Make a Difference? Cognitive? Physical? Or Both? To be presented at the 132nd *Annual Meeting of the American Neurological Association*, October 7-10, Washington, DC

29. Ruocco, A, Merzegorra, A., Allen, S., **Schultheis, MT.**, Tuscan, L., Lake, T., Irani, F., Ayaz, H., Onaral, B., Chute, DI (2007) One month test-retest reliability of fNIRS during verbal fluency in a subject with discreet lesion of left frontal lobe. To be presented at the 27th *Annual conference of the National Academy of Neuropsychology*, Nov. 14-17, Scottsdale, AZ

30. Sestito, N., Weisser, V., Elovic, E., Ang, J., Fleksher, C., Millis, SR. and **Schultheis, MT.**, (2007) Examining the cognitive demands of driving in multiple sclerosis. To be presented at the 27th *Annual conference of the National Academy of Neuropsychology*, Nov. 14-17, Scottsdale, AZ.

31. **Schultheis MT**, Merzegorra, A., Weisser, A., Arenth, P., Russell, K., Scanlon, J., Izzetoglu, K., Ricker JH. (2008) Demonstration of fNIRS technology for assessing cognitive functioning following TBI. To be presented at the 116th *Annual Conference of the American Psychological Association*, August 15-18, Boston, MA

32. Weisser, V., Sestito, N., Manning, K., Biasco, A., Elovic, E., **Schultheis, MT** (2008) Characterizing driving behaviors in Multiple Sclerosis: The influence of cognition versus disease severity. To be presented at the 116th *Annual Conference of the American Psychological Association*, August 15-18, Boston, MA

33. Manning, K., Weisser, V., Biasco, A., Ang, J., Elovic, E., **Schultheis**, MT (2008). Vision and Driving in Multiple Sclerosis. To be presented at the 116th Annual Conference of the American Psychological Association, August 15-18, Boston, MA

34. Manning, K., **Schultheis**, MT, Mitura, R., Klimchuk, D., Neyens, D., Simone, L., Ang, J., Salvucci, D., and Boyle, L. (2009). Virtual Reality driving: Can new measures inform driving capacity in TBI?. Presented at the 38th Annual Meeting of the International Neuropsychological Society. Atlanta, Georgia

35. Weisser, V., Merzegorra, A., Izzetoglu, M., and., **Schultheis**, MT (2009). Neuroimaging and Neuropsychology: Is one signal enough?. Presented at the 38th Annual Meeting of the International Neuropsychological Society. Atlanta, Georgia

XIII. SOFTWARE

Garay, M.T. (1996) Neurocognitive Driving Assessment © in D.L. Chute and R.F. Westall B/C PowerLaboratory. Brooks/Cole Publishing Co. Pacific Grove

Schultheis,M.T. (2002) The Virtual Driver Rehabilitation System. © Kessler Medical Rehabilitation Research & Education Corporation (KMRREC).

XIV. INVITED PRESENTATIONS

International

1. **Schultheis**, MT, DeLuca, J., Mourant, R.R., & Recce, M. (2001, May). New Directions in Driving Assessment Following TBI: Virtual Reality" Paper presented at the 4th World Congress on Brain Injury, Turin, Italy.
2. **Schultheis**, MT (2002, Nov.) Future Directions in Driving Assessment: The Virtual Reality Simulator. Presentation given at the Virtual Reality & Rehabilitation: Algorithms, Avatars & Applications Symposium. Haifa, Israel
3. A.A. Rizzo and **Schultheis**, M.T (June, 2006). Virtual Reality and Neuropsychological Assessment and Rehabilitation. Workshop to be presented at 11th Annual Cyber Therapy 2006 Conference: Virtual Healing: Designing Reality, Quebec, Canada
4. **Schultheis**, MT (August,2008). VR and Driving: The Road to success is under construction. Workshop presented at the Virtual Rehabilitation annual conference, Vancouver, Canada

National

1. **Schultheis**, M.T., DeLuca, J., Madigan, N.K., Christodoulou, C., & Averill, A. (1999, December). Additional Learning Trials Result in Normal Memory Performance in

Moderate-Severe TBI. Poster presented at the 1st Annual TBI in the 21st Century Conference, Bethesda, MA

2. DeLuca, J., **Schultheis**, M.T., Madigan, N.K., Diamond, B.J.. & Averill, A. (1999, December). Normal Working Memory Performance in Moderate-Severe TBI Following Increased Time for Information Processing. Poster presented at the 1st Annual TBI in the 21st Century Conference, Bethesda, MA.
3. **Schultheis**, MT (2000, October) Driving After TBI: Assessment & New Technology. Presentation at the annual Outcomes and Effective Treatment for Persons with Brain Injury Conference. West Orange, NJ.
4. **Schultheis**, MT & Galski, T. (2000, October) Driving and Community Mobility after TBI. Workshop presented at the Outcomes and Effective Treatment for Persons with Brain Injury Conference. West Orange, NJ.
5. **Schultheis**, MT. Virtual Reality Applications in Rehabilitation. (2001, March) Presentation given at 3rd Annual Rehabilitation Psychology 2001: Science and Practice in the New Millennium conference, Atlanta, GA
6. **Schultheis**, MT. Virtual Reality: New Directions for Driving Assessment Following TBI, (2001, May) Presentation given at the Annual Conference of the New Jersey Brain Injury Association. Eatontown, NJ
7. **Schultheis**, MT. (2001, June) Virtual Reality and Driving Assessment: Future Directions Presentation given at the Williamsburg Traumatic Brain Injury International Conference. Williamsburg, VA
8. **Schultheis**, MT (2002, Sept) The uses and benefits of virtual reality technology in rehabilitation" Key Note Address given at the 3rd Annual HealthEast Brain Injury Conference. St.Paul, MN
9. **Schultheis**, MT (2002, Oct). New Directions for the Assessment of Driving: Virtual Reality Technology. Presentation given at the annual Driving Rehabilitation Symposium of the Association of Driver Education Specialist, Parsippany, New Jersey
10. **Schultheis**, MT (2003, June) The application of a virtual reality driving simulator to clinical populations". Research symposium given at the annual meeting of Rehabilitation Engineering Assistive Technology Society of North America (RESNA), Atlanta, GA
11. **Schultheis**, MT (2004, June) "Virtual Rehabilitation": What does virtual reality technology offer rehabilitation? Presentation given at the Brain Injury Association of Pennsylvania Annual conference. Harrisburg, PA.

12. **Schultheis, M.T.** (2004, September) Driving Assessment: Considerations for Psychologists. Presentation given to the joint meeting of the NJ Psychological Association & the NJ Neuropsychological Society, Morristown, NJ
13. Rappaport, L.J., Coleman-Bryer, R., and **Schultheis, M.T.** (2006, March). The use of technologies in return to driving. Workshop presented at the 2nd TBI In the 21st Century Interagency Conference, Bethesda, MA
14. **Schultheis, MT** (2006, June) "New Developments in the use of Virtual Reality for Rehabilitation" Presentation given at the Brain Injury Association of Pennsylvania Annual Conference. Harrisburg, PA
15. **Schultheis, MT** (2007, February), "The Neuropsychology of Driving". CE Workshop presented at the annual conference of the International Neuropsychological Society, Portland, Oregon.
16. **Schultheis, MT** (2007, March) "Driving assessment of rehabilitation populations" Presentation to be given at the 9th Annual Rehabilitation Psychology mid-year conference, Charlotte, NC
17. **Schultheis, MT** (2007, August), "Neuropsychology, Technology and Driving: Looking down the road for roadways and roadblocks" Div 40 Early Career Award presentation to be given at the annual meeting of the American Psychological Association, San Francisco, CA
18. **Schultheis, MT** (2007, November) "Virtual Reality Technology: Future Opportunities in Rehabilitation" Presentation to be given at the 28th Annual Neurorehabilitation Conference, Braintree Rehabilitation, Hospital, Boston, MA
19. **Schultheis, MT** (2007, November) "Determining Driving After Neurologic Compromise" Presentation to be given at the 28th Annual Neurorehabilitation Conference, Braintree Rehabilitation, Hospital, Boston, MA
20. **Schultheis, MT** (2008, October) "Neuropsychology and Driving" Workshop to be given at the 28th Annual Conference of the National Academy of Neuropsychology, NY, NY
21. **Schultheis, MT** (2009, May) "Virtual Reality Rehabilitation and TBI" Presentation given at the State of Science Conference: Virtual Reality Technology, Walter Reed Medical Center, Washington, DC
22. **Schultheis, MT** (2009, July) "Driving after TBI: Challenges and Opportunities" Presentation given at Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury Driving Evaluations after Traumatic Brain Injury Conference, Washington, DC

XV. WORKSHOPS & SYMPOSIA

1. Chute, D.L.(Chair), **Garay**, M., Barisa, J. and Westall, B. (1996, September). Multimedia Technologies in Neuropsychology Research, Teaching, and Clinical Practice Symposium conducted at the annual meeting of the Eastern Psychological Association, Philadelphia, PA
2. **Schultheis**, MT (Chair), Cox, D., Galski, T., Mourant, R. and Barth, J.T. (2000, August) Assessment of Driving Ability: Past and Future Directions. Symposium presented at the annual meeting of the American Psychological Association, Washington, D.C.
3. DeLuca, J., **Schultheis**, MT, and Donofrio, N., (2000, August), "Amnesia following damage to the basal forebrain in humans" presentation as part of "Mesial temporal vs basal forebrain amnesia: Single vs multiple memory system(s)?" symposium presented at the annual meeting of the American Psychological Association, Washington, D.C.
4. **Schultheis**, M.T. & Chute, D.L. (2000, November) Driving Assessment: Lessons from the Past & Directions for the Future. Special Topics Presentation presented at the annual meeting of the National Academy of Neuropsychology, Orlando, FL.
5. Rizzo, A.A. & **Schultheis**, M.T. (2001, February) Applications and Issues for the Use of Virtual Reality Technology for Neuropsychological Assessment and Rehabilitation. Continuing Education Workshop presented at the annual meeting of the International Neuropsychological Society, Chicago, IL
6. **Schultheis**, M.T. (Chair), (2001, April). Medical Devices and Biomaterials. Symposium presented at the Technology Trends Annual Conference, Atlantic City, N.J.
7. DeLuca, J., Donofrio, N., Ricker, J., **Schultheis**, M.T. & Shawaryn, M. (2001, June) Cognitive Impairment in Multiple Sclerosis: From the Lab to Real Life. Mini-Course presented at the annual meeting of the Consortium of Multiple Sclerosis Centers. Fort Worth, TX.
8. **Schultheis**, MT (Chair), Rizzo, A.A., Bowerly, T., Lengenfelder, J., Christianson, C. and Wilson, B. (2001, August) Virtual Reality: Adding Reality to Neuropsychological Assessment. Symposium presented at the American Psychological Association, San Francisco, CA
9. **Schultheis**, MT and Rizzo, A.A. (2001, October). Future Directions in Neuropsychology: The Application of Virtual Reality Technology. Workshop given at the annual conference of the National Academy of Neuropsychology, San Francisco, CA
10. **Schultheis**, MT (Chair), Rao, S., Chiaravolloti, N., DeLuca, J, Rohe, D. and Chelune, G. (2002, August). Research and Clinical Advances in Multiple Sclerosis. Symposium presented at the 110th Annual Convention of the American Psychological Association. Chicago, IL

11. **Schultheis**, MT and Chute, D.L. (Chairs), New Technologies in Neuropsychological Rehabilitation (2003, February). Symposium presented at the annual meeting of the International Neuropsychological Society, Honolulu, Hawaii
12. Kalmar, J., Lengenfelder, J., **Schultheis**, M.T. (Chair & Discussant). The Neuropsychology of Driving Assessment. (2003, February). Symposium presented at the annual meeting of the International Neuropsychological Society, Honolulu, Hawaii
13. Tulskey, D. (Chair), Chelune, G., Ricker, J.H., **Schultheis**, MT, and Smith, G. (2003, July) The evolution of cognitive testing: Will new research and technology cause a paradigm shift? Symposium to be presented at 26th Annual Mid-Year conference of the International Neuropsychological Society. Berlin, Germany
14. Hart, T. (Chair), **Schultheis**, MT., Kirsch, NL., and Scherer, M. (2003, October). Assistive technology in rehabilitation: New directions in individualized assessment, treatment and outcome evaluation. Course presented at the annual meeting of the American Congress on Rehabilitation Medicine, Tuscan, Arizona
15. **Schultheis**, M T. (2005, July). Virtual driving and real driving: the pros and cons of Vr simulation in driving rehabilitation. As part of Virtual Reality and Mental Health. Symposium given at the 11th Annual meeting of the International Human Computer Interface (HCI) conference, Las Vegas, NV
16. **Schultheis**, MT, (Chair) Simone, L., Rizzo, A.A., Hix, D., (June, 2005) Usability issues in the clinical application of virtual reality technology. Workshop to be presented at the 28th International Conference of the Rehabilitation Engineering and Assistive Technologies Society of North America (RESNA), Atlanta, GA
17. **Schultheis**, MT, (Chair) Hanks, R., and Healing, R. (August, 2005) Assessing driving ability: Balancing individual independence and public safety. Symposium presented at the annual conference of the American Psychological Association, Washington, D.C.
18. **Schultheis**, MT (August,2005) Virtual Rehabilitation: The evolution of cognitive assessment and rehabilitation using VR, paper presented as part of symposium at the annual conference of the American Psychological Association, Washington, D.C.
19. Utswatte, G., (Chair), Ricker, J. and **Schultheis**, MT (August, 2006). Technologies For Objectively Measuring Function and Cognition During Everyday Activities. Symposium presented at the annual conference of the American Psychological Association, Washington, D.C.
20. Gillis, M. and **Schultheis**, MT (Co-Chair) (August, 2009) Functional performance, Neuropsychology and Technologies. Symposium to be presented at the annual conference of the American Psychological Association, Toronto, CA

XVI. POSTERS AND PRESENTATIONS: NON-ARCHIVED

1. **Schultheis**, MT, Mourant, R. and DeLuca, J. (2001, January) Advantages of VR in Driving Assessment of Cognitively Impaired Populations. Paper presented at the 9th Annual Medicine Meets Virtual Reality Conference. Newport Beach, CA.
2. Mourant, R. R. & **Schultheis**, M. T. (August, 2001) An HMD Based Virtual Reality Driving Simulator. Paper presented at Driving Assessment 2001, Aspen, Colorado.
3. Rizzo, A.A. (Chair), Hodges, L., Hoffman, H., **Schultheis**, M.T., Strickland, D., Watson, B., Weiderhold, B. and Weiderhold, M. (August, 2001). Immersed in Anxiety or a Process to Healing: Virtual Reality Meets Mental Health. Panel presentation at the 28th International Conference on Computer Graphics and Interactive Techniques, SIGGRAPH. Los Angeles, Ca
4. Chute, D. L., **Schultheis**, M., Jefferson, A., Cosentino, S., Zabel, T.A., Moelter, S., Hillary, F., Schatz, P., & Philips, K. (September, 2001) The Unwell Elderly: Neuropsychological technologies in special circumstances. International Conference on Technology and Aging. Toronto, Canada
5. Myers, C., DeLuca, J. **Schultheis**, M.T., Schnirman, G. & Gluck, M. (October, 2001) Dissociating amnesic syndromes: Insights from classical conditioning. Paper presented at the Pavlovian Society Annual Meeting, New Brunswick, NJ.
6. **Schultheis**, MT (Jan., 2002) The Virtual Office: Assessing & Re-training Vocationally Relevant Cognitive Skills. Paper presented at the 10th Annual Medicine Meets Virtual Reality (MMVR) conference. Newport Beach, CA
7. **Schultheis**, MT, Garay, MT, Millis, SR and DeLuca, J. (July, 2002). Cognitive Impairment and MS: Relationship with Driving Accidents and Violations. Paper presented at the 24th Mid-Year Meeting of the International Neuropsychological Society, Stockholm, Sweden
8. **Schultheis**, MT. (August, 2002), Cognitive Ability and Driving in Multiple Sclerosis. In Research and Clinical Advances in Multiple Sclerosis symposium. Chair: Schultheis, MT. Presented at the 110th Annual Convention of the American Psychological Association. Chicago, IL
9. Ricker, J. and **Schultheis**, MT. (August, 2002), Technology and Assessment: Looking into the Future. In "The History of Neuropsychological Assessment" symposium. Chair: Tulsky, D. Presented at the 110th annual convention of the American Psychological Association. Chicago, IL.
10. **Schultheis**, MT. (August, 2002) Returning to work: The Virtual Office. In "Innovator's Forum: From virtual reality to the Internet" symposium. Chairs: Maheu, M.,

- Gregerson, M., Whitmore, E. at the 110th annual convention of the American Psychological Association. Chicago, IL
11. **Schultheis**, M.T., Garay, E., Millis, S.R., DeLuca, J. (October, 2002), Cognitive Impairment and Driving Ability in Multiple Sclerosis. Poster presented at the 127th Annual Meeting of the American Neurological Association. New York, NY.
 12. Rizzo, A.A., Bowerly, T., Buckwalter, G., **Schultheis**, M.T., Matheis, R., Shahabi, C., Kim, L., Sharifzadeh, M. (August, 2003). Virtual environments for the assessment of cognitive and functional abilities: Results from the Virtual Classroom and Office. Poster to be presented at the 111th annual convention of the American Psychological Association, Toronto, Canada
 13. **Schultheis**, M.T. (2005). “Virtual Driving” versus “Real Driving” – Pros and Cons of using a VR driving simulator for rehabilitation. Paper presented at the 11th International Conference on Human-Computer Interface, Las Vegas, NV
 14. Tulskey, D., **Schultheis**, M.T., Simone, L.K., Callahan, L., Nead, R. (2005) Retraining driving skills after SCI: A VR approach. Poster presented at the annual conference of the American Academy of Spinal Cord Injury Psychologist and Social Worker, Las Vegas, Nevada
 15. Merzagora A.C., **Schultheis** M.T., Izzetoglu M., Onaral B. (September, 2006) "Functional near infrared spectroscopy for the assessment of cognitive impairments following traumatic brain injury" 5th Inter-Institute Workshop on Optical Diagnostic Imaging from Bench to Bedside at the National Institutes of Health, Bethesda, MD.
 16. Merzagora A.C., **Schultheis** M.T., Izzetoglu M., Pourrezaei K., Onaral B.K. (October, 2006) "FNIR for the assessment of cognitive impairments", poster present at the 2006 BMES Annual Fall Meeting, Chicago, IL.
 17. Roseman, E, Panyavin, I., and **Schultheis**, M.T. (2007) “What we don’t know about driving may hurt us” Poster presented at the 9th annual conference of the APA Div.22 Rehabilitation Psychology meeting, Charlotte, NC
 18. Weisser, Sestito, N., Fleksher, C., Ang, J., Elovic, E., Nead, R., Millis, S.R. and **Schultheis**, M.T. (2007) “Examining the cognitive demands of driving in multiple sclerosis”. Poster to be presented at the 9th annual conference of the APA Div.22 Rehabilitation Psychology meeting, Charlotte, NC
 23. **Schultheis**, M.T., Weisser, V., Merzagora, A.C., Arenth, P.M., Russell, K.C., Scanlon J., Izzetoglu, J. and Ricker, J.H. (2007). “Demonstration of a new portable brain imaging technology for the assessment and rehabilitation of cognitive functioning following TBI: A Case Study”. Poster presented at the 9th annual conference of the APA Div.22 Rehabilitation Psychology meeting, Charlotte, NC.

XVII. INVITED LECTURES AND GRAND ROUNDS

"Virtual Reality and Rehabilitation". Lecture at UMDNJ-NJ Medical School, Department of Physical Medicine and Rehabilitation monthly meeting. University of Medicine & Dentistry of NJ- NJ Medical School, West Orange, NJ. May 2000

"Neuropsychology & Virtual Reality Technology". Guest lecturer at New Jersey Institute of Technology (NJIT), Computer Information Sciences Department. Newark, NJ. October, 2000

"Applications and Issues for the Use of Virtual Reality Technology for Neuropsychological Assessment and Rehabilitation" Grand Rounds at the Department of Physical Medicine & Rehabilitation, Rehabilitation Institute of Chicago, Chicago, IL. February, 2001.

"New Directions in Rehabilitation: Virtual Reality Technology". Guest lecture at the Department of NeuroRehab Medicine, Hospital for Joints Disease/New York University, NYC, NY, April, 2001

"Expanding the Boundaries of Psychology through the Application of Virtual Reality Technology" , Seton Hall University, Counseling Psychology Student Association, West Orange, NJ February, 2002

"Virtual Rehabilitation": Applying virtual reality technology to real life functioning, Dept. of Physical Medicine and Rehabilitation Grand Rounds, University of Pittsburgh, Pittsburg, PA, January, 2005

"New Opportunities in Technology and Psychology" Department of Psychology, University of Cincinnati, Cincinnati, Ohio, April, 2007

"Technology and Neuropsychology: Lessons and Opportunities" Department of Psychology, Washington College, Chestertown, Maryland, November, 2007

"Driving assessment in rehabilitation populations: What facts can guide our recommendations?" Department of Physical Medicine and Rehabilitation, The Johns Hopkins University, Baltimore Maryland, April, 2009.

XVIII. TEACHING EXPERIENCE

a. Undergraduate	Introduction to Psychology Psychological Testing and Assessment Introduction to Genetics Laboratory Abnormal Psychology
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- b. Graduate Principles of Neuroscience
Technologies in Psychology
Case Assessment and Integration
Dissertation Supervision
Independent Research
- c. Professional Traumatic Brain Injury Technical Assistance Program
Educator Training Course

XIX. THESIS COMMITTEES

- 2000-2002** **Fairleigh Dickenson University**
Robert Matheis, graduated 2002
- 2005 – present** **Drexel University**
Master's in Psychology
Lori Ann Tuscan, anticipated graduation 2011
Kelly Pillard, anticipated graduation 2011
- Ph.D. in Psychology**
Christopher Ochner, graduated 2006
Jessica Lease Spellbeyer, graduated 2007
Farzon Irani, graduated 2008
Nicole Sestito, expected graduation 2010
Emily Roseman, expected graduation 2010 (Chair)
Valerie Weisser, expected graduation 2011 (Chair)
Kevin Manning, expected graduation 2012 (Chair)
- Ph.D. in Biomedical Engineering**
Hasan Ayaz, expected graduation 2011
Anna Merzegorra, expected graduation 2010 (Co-Chair)

XX. OTHER EDUCATIONAL ACTIVITIES

- 1997 **Lecturer and Internet Course Assistant**
Philadelphia College of Pharmacy and Science, Philadelphia, PA.
- 1998-2000 **Colloquium Series Instructor**
Neuropsychology and Psychology Services
NJ Veterans Administration Medical Center, East Orange, NJ.

XXI. MAJOR COMMITTEE ASSIGNMENTS

a. National and Regional

- 2002-2003 IEEE-VR 2003
Conference Program Committee
Student Volunteer Chair
- 2002-2004 New Jersey Neuropsychological Society
Board Member
- 2000-2006 National Research Council, Transportation Research Board
(A3B06): Simulation and Measurement of Vehicle & Operator
Performance
- 1998-present AMERICAN PSYCHOLOGICAL ASSOCIATION (APA)

Division 40: Clinical Neuropsychology
Conference Program Committee (2002-2005)
Ethic Minority Affairs Steering Committee (2004 - present)
Chair (2009-2011)
- Division 22: Rehabilitation Psychology
Awards Committee (2003-2006)
Diversity Committee (2004- present)
Mid Year Conference Chair (2007)
APA Div 22 Conference Chair (2009)
- 2004- present National Academy of Neuropsychology(NAN)
Cultural and Diversity Committee (2006-2008)
- 2006- present Philadelphia Neuropsychological Society
Board Member (2006)
Corresponding Secretary (2007)
President Elect (2009)
- 2007-present International Neuropsychological Society
Conference Program Committee
- 2008 – present International Society on Virtual Rehabilitation
Board Member

b. Medical School and Department

- 2000 Graduate Medical Education Committee
Department of Physical Medicine & Rehabilitation
Univ. of Medicine & Dentistry of NJ, Newark, NJ

2000- 2005 Institutional Review Board (IRB) Committee,
Kessler Medical Rehabilitation Research & Education Corp.,
West Orange, NJ

XXII. PROFESSIONAL SOCIETIES

a. Membership

1994- present Philadelphia Neuropsychology Society
1994- present American Psychological Association
 Division 22: Rehabilitation Psychology
 Division 40: Neuropsychology
1996- present National Academy of Neuropsychology
1998- present International Neuropsychology Society
2001- 2004 The Human Factors & Ergonomics Society
2000- 2008 Transportation Research Board

b. Service

Journal & Editorial Activity

2005-present Editorial Board
 Rehabilitation Psychology

2002 Special Issue Editor “*Driving and Traumatic Brain Injury*”
 Journal of Head Trauma Rehabilitation, Vol. 17; Number 2

Ad hoc Reviewer

Archives of Physical Medicine & Rehabilitation	Acta Neurologica Scandinavia
Journal of Clinical and Experimental Neuropsychology	Journal of Head Trauma Rehabilitation
Journal of International Neuropsychology Society	Journal of Psychosomatic Research
Neurology	Neurology Review
Neuropsychology	The Clinical Neuropsychologist
Child Neuropsychology	Transportation Research

Contributing Developer

1998-2000 DistanCE Learning, Continuing Education Program
 National Academy of Neuropsychology

XXIII. COMMUNITY OUTREACH AND PATIENT EDUCATION

1997 Seton Hall University: Latino Student Organization
Guest speaker for annual career development seminar,
“*Starting Early For a Successful Career*”

1999 Traumatic Brain Injury Technical Assistance Program
Hunter College, New York, NY, Educator Training Course
“*Multicultural Issues in Rehabilitation*”

- 2000 Northern NJ Chapter of the National Multiple Sclerosis Society
Guest Speaker for monthly support group meeting
“*Driving Issues and Questions After MS*”
- 2005-2006 Christopher Columbus Awards
Semifinalist Judge for national science competition for U.S. middle
school

XXIV. MEDIA COVERAGE OF RESEARCH

- Reuters International: Webcast interview regarding *Neurology* manuscript "Examining the Influence of Cognitive Impairment on Driving in Multiple Sclerosis". Reporting websites included: Web MD, BBC, Medscape and various international health care sites., 2001
- BBC Radio Science Unit: Interview for "Go Digital" weekly radio show, international broadcast and web cast, 2002
- Public Broadcasting Service (PBS): Interview for national television special entitled "Freedom Machines", 2002
- APA's Monitor on Psychology: "In the driver's seat". Interview and article written covering research conducted in the development and application of a Virtual Reality (VR) driving simulator, January, 2002
- New York Times. "Driving along a virtual road to recovery" Interview and article covering research using Virtual Reality (VR) for driving phobia treatment, April, 2003
- New Jersey Network (NJN) News: Interview and television news coverage of research and development of a virtual reality driving simulator. April, 2004
- WNBC-TV HealthWatch: Interview and television news coverage of research and development of a virtual reality driving simulator. July, 2004
- The History Channel Special "The Extreme Brain" : Interview and coverage on research and development of the fNIRS system. July, 2008

XXV. AUXILLARY SKILLS

Additional Languages: Spanish: fluent