

Curriculum Vitae

Gregory Belenky, M.D.

Research Professor & Director
Sleep and Performance Research Center
Washington State University Spokane
P.O. Box 1495
Spokane, WA 99210-1495

Tel: 509-358-7738
Fax: 509-358-7810
Cell: 509-953-6035
Email: belenky@wsu.edu

Colonel, Medical Corps, U.S. Army (Retired)



Education

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| B.A. | Psychology, Yale University, New Haven, CT
Angier Prize for Best Undergraduate Research in Psychology
High Honors in Psychology | 1966 |
| M.D. | Stanford University School of Medicine, Palo Alto, CA | 1971 |

Research and Professional Experience

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| 1966-1968 | Research Assistant, Sleep Research Laboratory (Dr. William Dement),
Stanford University School of Medicine, Stanford, CA |
| 1971-1972 | Intern (Internal Medicine), School of Medicine, University of Utah, Salt Lake
City, UT |
| 1972-1975 | Resident (Psychiatry), School of Medicine, Yale University, New Haven, CT |
| 1975-1984 | Research Psychiatrist, Department of Medical Neurosciences, Division of
Neuropsychiatry, Walter Reed Army Institute of Research (WRAIR),
Washington, D.C. |
| 1976-1978 | Instructor, Department of Psychiatry, School of Medicine, Uniformed
Services University of the Health Sciences (USUHS), Bethesda, MD |
| 1977-2004 | Emergency Service Psychiatrist (part-time), Woodburn Center for Community
Mental Health, Annandale, VA |
| 1978-1980 | Assistant Professor, Department of Psychiatry, School of Medicine, USUHS,
Bethesda, MD |

1980-1996	Associate Professor, Department of Psychiatry, School of Medicine, USUHS, Bethesda, MD
1984-1995	Chief, Department of Behavioral Biology, Division of Neuropsychiatry, WRAIR, Washington, D.C.
Jan-Apr 1991	Chief, Mental Health Team, Medical Troop, Regimental Support Squadron, Second Armored Cavalry Regiment, Operation Desert Storm, Saudi Arabia, Kuwait, and Iraq
1995-2003	Director, Division of Neuropsychiatry, WRAIR
1996-2004	Professor, Department of Psychiatry, School of Medicine, USUHS
Jun-Aug 2003	Division Psychiatrist, Second Infantry Division, Camp Casey, South Korea
2003-2004	Director, Division of Neuroscience, WRAIR
2004-pres.	Research Professor and Director, Sleep and Performance Research Center, Washington State University Spokane

Administrative Experience

From 1975-2004, I worked at the Walter Reed Army Institute of Research (WRAIR) conducting medical research and doing medical research administration. From 1984-1995, as Chief, Department of Behavioral Biology, WRAIR, I supervised ~20 research scientists, research staff, and administrative personnel and an annual budget of ~\$1.8 M. From 1996 to 2003, as Director, Division of Neuropsychiatry, WRAIR, I supervised ~40 research scientists, research staff, and administrative personnel in two departments and an annual budget of ~\$3.0 M. From 2003-2004, as Director, Division of Neuroscience, WRAIR, I supervised ~60 research scientists, research staff, and administrative personnel in three departments and an annual budget of ~\$5.0 M.

Teaching Experience

From 1976-2004, as a member of the faculty, Department of Psychiatry, School of Medicine, Uniformed Services University of the Health Sciences (USUHS), I lectured to USUHS medical students on combat stress and on sleep, sleep deprivation, and human performance, supervised USUHS medical students during their psychiatry clerkships, and supervised U.S. Army psychiatry residents.

From 2004-present, as a member of the faculty of WSU, I lectured to WSU undergraduates on sleep, sleep deprivation, and human performance, presented seminars on sleep and performance to VCAPP graduate students, lectured on sleep and sleep disorders to the WSU Pullman/UI Moscow WWAMI students, and lectured on sleep and performance in operational settings to University of Washington Psychiatry, Internal Medicine, and Family Practice post-graduate physicians working in the Deaconess and Sacred Heart Hospitals. I have served on the dissertation committee for one VCAPP master's degree student and am currently on the dissertation committee and directly supervising in her dissertation work a Department of Psychology Ph.D. student. I am course chair for the Nervous System course in the WWAMI

Spokane program. While my primary focus has been research and research administration, I have over 30 years experience teaching.

Military Service

1975-2004 Active Duty, U.S. Army; retired as a Colonel

Professional Organizations

American Psychiatric Association	Member	1975 - 1984
	Fellow	1984 - 2002
	Distinguished Fellow	2003 - present
American Academy of Sleep Medicine	Member	2000 - present
Sleep Research Society	Member	2000 - present
European Sleep Research Society	Member	2000 - present

Other Organizational Affiliations

Sleep Disorders Research Advisory Board National Heart, Lung & Blood Institute	Ex-Officio Member	1998 - 2004
Board of Directors National Sleep Foundation	Member	2000 - present

Board Certification

American Board of Psychiatry & Neurology June 1978

Medical Licenses

Virginia # 0101030411

Washington #MD00047310

Hospital Privileges – none at present

External Funding (current and completed in last 3 years)

USAMRMC [04167002 / W81XWH05-1-0099] Belenky (PI) 11/15/04 – 11/30/08

Laboratory and Field Studies of Sleep and Performance

THE MAJOR GOAL(S) OF THIS STUDY ARE TO: 1) to determine in the laboratory, the effect of systematic sleep restriction on performance and subsequent recovery; 2) to characterize in the naturalistic field environment, the impact of shift timing and duration on performance in medical residents, police, U.S. Air Force air refueling crews, and production personnel in a biotech company.

ROLE: Principal Investigator TOTAL DIRECT COSTS: \$ 3,195,278 EFFORT: 57.5%

US Air Force/DURIP [not available] Belenky (PI) 04/15/06 – 04/14/07

Sleep and Performance Research Center Equip

THE MAJOR GOAL(S) OF THIS STUDY ARE TO: equip the Sleep & Performance Research Center with state-of-the-art equipment.

ROLE: Principal Investigator TOTAL DIRECT COSTS: \$ 725,928 EFFORT: 0%

Keck Foundation [not available] Belenky (PI) 01/01/07 – 12/31/09

New theoretical, Technical and Experimental Approaches to Brain Organization of Sleep and Performance

THE MAJOR GOAL(S) OF THIS STUDY ARE TO: characterize sleep-like states in cortical columns in rats and humans.

ROLE: Principal Investigator TOTAL DIRECT COSTS: \$ 1,494,057 EFFORT: 0%

Airline Pilots Association (ALPA) [not available] Belenky (PI) 03/08/07 – 03/31/07

Fatigue Analysis of the Comair Flight 3191 Crash

THE MAJOR GOAL(S) OF THIS STUDY ARE TO: investigate the role of fatigue in the Comair 3191 crash.

ROLE: Principal Investigator TOTAL DIRECT COSTS: \$ 5,433 EFFORT: 2%

Continental Airlines [not available] Belenky (PI) 03/15/07 – 06/30/07

Ultra Long-Range Flight Operations OpSpecs

THE MAJOR GOAL(S) OF THIS STUDY ARE TO: apply sleep/circadian rhythm performance prediction modeling to ultra long-range commercial flight operations.

ROLE: Principal Investigator TOTAL DIRECT COSTS: \$ 17,030 EFFORT: 5%

American Transportation Research Institute [not available] Belenky (PI) 07/01/07 – 12/15/07

Modeling Divided vs. Consolidated Sleep

THE MAJOR GOAL(S) OF THIS STUDY ARE TO: apply mathematical modeling to evaluate the performance effects of divided vs. consolidated sleep.

ROLE: Principal Investigator TOTAL DIRECT COSTS: \$ 52,500 EFFORT: 20%

Federal Motor Carrier Safety Administration [not available] Belenky (PI) 10/01/07 – 06/30/10

Motor Coach Driver Fatigue Research

THE MAJOR GOAL(S) OF THIS STUDY ARE TO: conduct field studies on the effects of current hours of service regulations on commercial motor coach driver sleep and performance.

ROLE: Principal Investigator TOTAL DIRECT COSTS: \$ 267,000 EFFORT: 15%

Federal Motor Carrier Safety Administration [not available] Belenky (PI) 10/01/07 – 12/31/10

Investigation of Split Sleep Schedules on Commercial Vehicles Driver Safety and Health

THE MAJOR GOAL(S) OF THIS STUDY ARE TO: conduct laboratory studies of the health and performance effects of divided/split vs. consolidated sleep.

ROLE: Principal Investigator TOTAL DIRECT COSTS: \$ 347,143 EFFORT: 15%

Continental Airlines [not available] Belenky (PI) 12/01/07 – 03/01/09

Field Studies of Ultra Long-Range Flights

THE MAJOR GOAL(S) OF THIS STUDY ARE TO: conduct field studies using actigraphy and Palm Pilot PVT to validate the predictions of FAST sleep/performance prediction model in ultra long-range flights.

ROLE: Principal Investigator TOTAL DIRECT COSTS: \$ 133,780 EFFORT: 12.5%

U.S. Patents:

Patent No. US 6,241,686 - System and method for predicting human cognitive performance using data from an actigraph.

Patent No. US 6,419,629 - Method for predicting human cognitive performance.

Patent No. US 6,527,715 - System and method for predicting human cognitive performance using data from an actigraph.

Patent No. US 6,530,884 - Method and system for predicting human cognitive performance.

Provisional Patent No. US 60/980,856 - Methods and apparatuses for rostering

Editorial Board

Aviation, Space and Environmental Medicine – 2006 – present

Section Editor

Occupational Sleep Medicine, In Kryger, M., Roth, T., and Dement, W.C. Principles and Practice of Sleep Medicine, 5th Edition, in preparation. Expected publication in 2009.

Course Chair

WWAMI Spokane, Nervous System Course - 2008

Reviewer

Aviation, Space, and Environmental Medicine

Behavioral Sleep Medicine

Journal of Sleep Research

Psychopharmacology

Sleep

Sleep Medicine Reviews

Grant Reviewer

NASA

NIH

DOJ

Consultant

Qantas Airlines/University of South Australia (Drew Dawson) - Fatigue Management Research Study (FMRS) – actigraph/palm pilot PVT sleep and performance study of pilots flying international routes – 2002-2006

Boeing – Effect of oxygen supplementation during sleep at altitude on subsequent waking performance – 2004-present

Military Training:

Air Assault School (rappelling from helicopters), Fort Campbell, KY, 1981

Airborne School (parachuting), Fort Lee, VA, 1982

Wartime Service:

Chief, Mental Health Team, Medical Troop, Regimental Support Squadron, Second Armored Cavalry Regiment, Operation Desert Storm, Saudi Arabia, Kuwait, and Iraq, January-April 1991

Publications

- 1) Cole, M., **Belenky, G.L.**, Boucher, R., Fernandez, R., Myers, D. (1965) Probability learning to escape from shock. *Psychonomic Science*, 3, 127-129.
- 2) **Belenky, G.L.**, Cole, M. (1968) The role of test trials in paired-associate verbal learning. *Psychonomic Science*, 10, 201-203.
- 3) Ferguson, J., Henriksen, S., McGarr, K., **Belenky, G.L.**, Gonda, W., Cohen, H., Dement, W.C. (1968) Phasic event deprivation in the cat. *Psychophysiology*, 5, 238-39.
- 4) **Belenky, G.L.**, Henriksen, S., McGarr, K., Ferguson, J., Cohen, H., Dement, W.C. (1968) Effect of anticholinesterase (DFP) on the sleep-wakefulness cycle of the cat. *Psychophysiology*, 5, 243.
- 5) **Belenky, G.L.** Unusual visual experiences reported by subjects in the British Army study of sustained operations, Exercise Early Call. (1979) *Military Medicine*, 144, 695-696.
- 6) **Belenky, G.L.**, Holaday, J.W. (1979) The opiate antagonist naloxone modifies the effects of electroconvulsive shock (ECS) on respiration, blood pressure, & heart rate. *Brain Research*, 177, 414-417.
- 7) Holaday, J.W., **Belenky, G.L.** (1980) Opiate-like effects of electroconvulsive shock in rats: a differential effect of naloxone on nociceptive measures. *Life Sciences*, 27, 1929-1938.
- 8) Belenky, G.L. & Holaday, J.W. (1981) Repeated electroconvulsive shock (ECS) & morphine tolerance: demonstration of cross sensitivity in the rats. *Life Sciences*, 29, 553-563.
- 9) Tortella, F.C., Cowan, A., **Belenky, G.L.**, & Holaday, J.W. (1981) Opiate-like electroencephalographic & behavioral effects of electroconvulsive shock in rats. *European Journal of Pharmacology*, 76, 121-128.

- 10) **Belenky, G.L.**, Newhouse, P., & Jones, F.D. (1982) Prevention & treatment of psychiatric casualties in the event of a war in Europe. *Revue Internationale des Services de Sante*, 55, 303-307.
- 11) Holaday, J.W., Hitzemann, R.J., Curell, J., Tortella, F.C., **Belenky, G.L.** (1982) Repeated electroconvulsive shock or chronic morphine treatment increases the number of 3H-D-Ala², D-Leu⁵-enkephalin binding sites in rat brain membranes. *Life Sciences*, 31, 2359-2362.
- 12) **Belenky, G.L.**, Kaufman, L.W. (1983) Cohesion & rigorous training: observations of the air assault school. *Military Review*, 63, 24-34.
- 13) **Belenky, G.L.** Gelinias-Sorell, Kenner, J.R., Holaday, J.W. (1983) Evidence for delta-receptor involvement in the post-ictal antinociceptive responses to electroconvulsive shock in rats. *Life Sciences*, 33, Supplement I 583-585.
- 14) Kaufman, L.W., **Belenky, G.L.** (1984) Staying alive: Knowing what to do until the medic arrives. *Military Review*, 64, 28-33.
- 15) **Belenky, G.L.**, Noy, S., & Solomon, Z. (1985) Battle stress: The Israeli experience. *Military Review*, 65, 28-37.
- 16) Deeken, M.G., Newhouse, P.A., **Belenky, G.L.**, Eshelman, S.D., Parker, M.T., Jones F.D. (1985) Division psychiatrists in peacetime. *Military Medicine*, 150, 455-457.
- 17) **Belenky, G.L.**, Noy, S., Solomon, Z., & Jones, F.D. (1985) Contemporary Israeli studies in combat psychiatry. *Annales Medicinæ Militaris Fenniae*, 60, 105-110.
- 18) Holaday, J.W., Tortella, F.C., Meyerhoff, J.L., **Belenky, G.L.**, Hitzemann, R.J. (1986) Electroconvulsive shock activates endogenous opioid systems: Behavioral & biochemical correlates. *Annals of the New York Academy of Sciences*, 467, 249-255.
- 19) Holaday, J.W., Tortella, F.C., Long, J.B., **Belenky, G.L.**, Hitzemann, R.J. (1986) Endogenous opioids & their receptors: Evidence for involvement in the post-ictal effects of electroconvulsive shock. *Annals of the New York Academy of Sciences*, 462, 124-139.
- 20) **Belenky, G.L.** (1987) Varieties of reaction & adaptation to combat experience. *Bulletin of the Menninger Clinic*, 51, 64-79.
- 21) Hitzemann, R.J., Hitzemann, B., Blatt, S., Tortella, F.C., Kenner, J.R., **Belenky, G.L.**, Holaday, J.W. (1987) Repeated electroconvulsive shock: Effect on sodium dependency & regional distribution of opioid-binding sites. *Molecular Pharmacology*, 31, 562-566.
- 22) **Belenky, G.L.** Psychiatric casualties: The Israeli experience. (1987) *Psychiatric Annals*, 17, 528-31.
- 23) O'Donnell, V.M., Balkin, T.J., Andrade, J.R., Simon, L.M., Kamimori, G.H., Redmond, D.P., **Belenky, G.** (1988) Effects of triazolam on performance & sleep in a model of transient insomnia. *Human Performance*, 1, 145-160.
- 24) Penetar, D., Redmond, D., & **Belenky, G.** (1989) Effects of triazolam on sleep & memory during long range deployments by air. *Aviation, Aerospace & Environmental Medicine* 60, 594-98.

- 25) Balkin, T.J., O'Donnell, V.M., Kamimori, G.H., Redmond, D.P., & **Belenky, G.** (1989) Sleep inertia following triazolam-induced recovery sleep. *Human Psychopharmacology* 4, 291-296.
- 26) Balkin, T.J., O'Donnell, V.M., Kamimori, G.H., Redmond, D.P., & **Belenky, G.** (1989) Administration of triazolam prior to recovery sleep: Effects on sleep architecture, subsequent alertness and performance. *Psychopharmacology* 99, 526-531.
- 27) Newhouse, P.A., **Belenky, G.**, Thomas, M., Thorne, D., Sing, H.C. & Fertig, J. (1989) The effects of d-amphetamine on arousal, cognition, and mood after prolonged total sleep deprivation. *Neuropsychopharmacology* 2, 153-164.
- 28) Ursano, R.J., Holloway, H.C., Jones, D.R., Rodriquez, A.R., and **Belenky, G.L.** (1989) Psychiatric care in the military community: family and military stressors. *Hospital & Community Psychiatry* 40, 1284-1289.
- 29) Pleban, R.J., Valentine, P.J., Penetar, D.M., Redmond, D.P., and **Belenky, G.** (1990) Characterization of sleep and body composition changes during ranger training. *Military Psychology* 2, 145-56.
- 30) McCann, U.D., Penetar, D.M., and **Belenky, G.** (1990) Acute dystonic reaction in normal humans caused by catecholamine depletion. *Clinical Neuropharmacology* 13, 565-568.
- 31) Kamimori, G.H., Smallridge, R.C., Redmond, D.P., **Belenky, G.L.**, and Fein, H.G. (1990) The effect of exercise on atropine pharmacokinetics. *European Journal of Clinical Pharmacology* 39, 395-397.
- 32) Penetar, D.M., Sing, H.C., Thorne, D.R., Thomas, M.L., Fertig, J.B., Schelling, A.S.D., Sealock, J.C., Newhouse, P.A., and **Belenky, G.** (1991) Amphetamine effects on recovery sleep following total sleep deprivation. *Human Psychopharmacology* 6, 319-323.
- 33) Balkin, T.J., O'Donnell, V.M., Wesensten, N., McCann, U., and **Belenky, G.** (1992) Comparison of the daytime sleep and performance effects of zolpidem versus triazolam. *Psychopharmacology* 107, 83-88.
- 34) McCann, U.D., Penetar, D.M., Shaham, Y., Thorne, D.R., Gillin, J.C., Sing, H., Thomas, M. & **Belenky, G.** (1992) Sleep deprivation and impaired cognition: The role of catecholamines. *Biological Psychiatry* 31, 1082-97.
- 35) Newhouse, P.A., Penetar, D.M., Fertig, J., Thorne, D.R., Sing, M., Thomas, M., Cochran, J. & **Belenky, G.** (1992) Stimulant drug effects on performance and behavior after prolonged sleep deprivation: A comparison of amphetamine, nicotine, and deprenyl. *Military Psychology* 4, 207-233.
- 36) Wesensten, N.J., Crowley, J., Balkin, T., Kamimori, G., Iwanyk, E., Pearson, N., Devine, J., **Belenky, G.** & Cymerman A. (1993) Effects of simulated high altitude exposure on long-latency event-related brain potentials and performance. *Aviation, Space and Environmental Medicine* 64, 30-36.
- 37) McCann, U.D., Penetar, D.M., Shaham, Y., Thorne, D.R., Sing, H.C., Thomas, M.L., Gillin, J.C., & **Belenky, G.** (1993) Effects of catecholamine depletion on alertness and mood in rested and sleep deprived normal volunteers. *Neuropsychopharmacology* 8, 345-356.

- 38) Penetar, D., McCann, U., Thorne, D., Kamimori, G., Galinski, C., Sing, H., Thomas, M. & **Belenky, G.** (1993) Caffeine reversal of sleep deprivation effects on alertness and mood. *Psychopharmacology* 112, 359-365.
- 39) Wesensten, N.J., Balkin, T.J., Kamimori, G.H., Crowley, J.S., Iwanyk, E., Kaufman, D., Pearson, N., Amoroso, P., **Belenky, G.**, & Cymerman, A. (1993) Effects of simulated high altituded exposure on long-latency ERPs and performance. *Aviation, Space and Environmental Medicine* 64, 30-36.
- 40) Wesensten, N.J., Balkin, T.J., & **Belenky, G.** (1995) Effects of daytime administration of zolpidem versus triazolam on memory. *European Journal of Pharmacology* 48, 115-122.
- 41) Wesensten, N.J., Balkin, T.J., Davis, H.Q., and **Belenky, G.** (1995) Reversal of triazolam and zolpidem-induced memory impairment by flumazenil. *Psychopharmacology* 121, 242-249.
- 42) McCann, U., Hall, T., Thorne, D., Thomas, M., Sing, H., Popp, K., & **Belenky, G.** (1995) The effects of l-dihydroxyphenylalanine on alertness and mood in alpha-methyl-para-tyrosine treated normal volunteers: Further evidence of the role of catecholamines in arousal and anxiety. *Neuropsychopharmacology* 13(1), 41-52.
- 43) Wesensten, N.J., Balkin, T.J., & **Belenky, G.** (1995) Effects of daytime administration of zolpidem and triazolam on performance. *Aviation, Space, and Environmental Medicine* 67, 115-120.
- 44) Braun, A. R., Balkin, T. J., Wesensten, N. J., Carson, R. E., Varga, M., Baldwin, P., Selbie, S., **Belenky, G.** & Herscovitch, P. (1997) Regional cerebral blood flow throughout the sleep-wake cycle. An H215O PET study. *Brain* 120, 1173-1197.
- 45) Braun, A. R., Balkin, T. J., Wesensten, N. J., Gwardry, F., Carson, R. E., Varga, M., Baldwin, P., **Belenky, G.** & Herscovitch, P. (1998) Dissociated pattern of activity in visual cortices and their projections during human rapid eye movement sleep. *Science* 279(5347), 91-5.
- 46) Wesensten, N.J., Balkin, T.J., and **Belenky G.L** (1999) Does sleep deprivation impact recuperation? A review and reanalysis. *Journal of Sleep Research*, 8 237-245.
- 47) Thomas, M L., Sing, H.C., **Belenky, G.**, Holcomb, H.H., Mayberg, H.S., Dannals, R.F., Wagner, Jr., H.N., Thorne, D.R. Popp, K.A., Rowland, L.M., Welsh, A.B., Balwinski, S.M. and Redmond, D.P. (2000) Neural basis of alertness and cognitive performance impairments during sleepiness. I. Effects of 24 h of sleep deprivation on waking human regional brain activity. *J. Sleep Research*, 9 335-352.
- 48) Kamimori G.H., Penetar, D.M., Headley, D., Thorne, D.R., Otterstetter, R., and **Belenky, G.** (2000) Effect of three caffeine doses on plasma catecholamines and alertness during prolonged wakefulness. *Eur. J. Clin Pharmacol* 56, 537-544.
- 49) Kamimori, G.H., Karyekar, C.S., Otterstetter, R., Cox, DS, Balkin, T.J., **Belenky, G.L.**, and Eddington, N.D. (2002) The rate of absorption and bioavailability of caffeine administered in chewing gum versus capsules to normal healthy volunteers. *Int. J. Pharm.* 234, 159-167.

- 50) Balkin, T.J., Braun, A.R., Wesensten, N.J., Jeffries, K., Varga, M., Baldwin, P., **Belenky, G.**, and Herscovitch, P. (2002) The process of awakening: A PET study of regional brain activity patterns mediating the reestablishment of alertness and consciousness. *Brain*, *125*, 2308-2319.
- 51) Wesensten, N.J., **Belenky, G.**, Kautz, M.A., Thorne, D.R., Reichardt, R.M., and Balkin, T.J. (2002) Maintaining alertness and performance during sleep deprivation: modafinil versus caffeine. *Psychopharmacology (Berl.)* *159*, 238-47.
- 52) **Belenky, G.**, Wesensten, N.J., Thorne, D.R., Thomas, M.L., Sing, H.C., Redmond, D.P., Russo, B.M., Balkin, T.J (2003) Patterns of performance degradation and restoration during sleep restriction and subsequent recovery: a sleep dose-response study. *J. Sleep Res.* *12*, 1-13.
- 53) Thomas, M.L., Sing, H.C., **Belenky, G.**, Holcomb, H.H., Mayberg, H.S., Dannals, R.F., Wagner, H.N., Thorne, D.R., Popp, K.A., Rowland, L.M., Welsh, A.B., Balwinski, S.M., Redmond, D.P. (2003) Neural basis of alertness and cognitive performance impairments during sleepiness II. Effects of 48 and 72 h of sleep deprivation on waking human regional brain activity. *Thalamus & Related Systems* *2*, 199-229.
- 54) Hursh, S.R., Redmond, D.P., Johnson, M.L., Thorne, D.R. **Belenky, G.**, Balkin, T.J., Miller, J.C., Eddy, D.R. (2004) Fatigue models for applied research in warfighting. *Aviation, Space and Environmental Medicine* *75*, Supplement A44-A53.
- 55) Johnson, M.L., **Belenky, G.**, Redmond, D.P., Thorne, D.R., Williams, J.D., Hursh, S.R., and Balkin, T.J. (2004) Modulating the homeostatic process to predict performance during chronic sleep restriction. *Aviation, Space and Environmental Medicine*, *75*, Supplement A141-A146.
- 56) Balkin, T.J., Kamimori, G.H., Redmond, D.P., Vigneulle, R.M., Thorne, D.R., **Belenky, G.** and Wesensten, N.J. (2004) On the Importance of Countermeasures in Sleep and Performance Models. *Aviation, Space, and Environmental Medicine*, *75*, Supplement A155-A157
- 57) Wesensten, N.J., **Belenky, G.**, Thorne, D.R., Kautz, M.A., and Balkin, T.J. (2004) Modafinil versus Caffeine: Effects on Fatigue during Sleep Deprivation. *Aviat Space Environ Med*, *75*, 520-525
- 58) Balkin T.J., Bliese P.D., **Belenky, G.**, Sing H., Thorne D.R., Thomas M., Redmond D.P., Russo, M., Wesensten, N.J. (2004) Comparative Utility of Instruments for Monitoring Sleepiness-Related Performance Decrements in the Operational Environment. *Journal of Sleep Research*, *13*, 219-227
- 59) McLellan T.M., Kamimori G.H., Bell D.G., Smith I.F., Johnson D., **Belenky G.** (2005) Caffeine Maintains Vigilance and Marksmanship in Simulated Urban Operations with Sleep Deprivation. *Aviat Space Environ Med* *76*, 39-45.
- 60) LaJambe, C.M., Kamimori, G.H., **Belenky, G.**, Balkin, T. (2005) Caffeine Effects on Recovery Sleep Following 27 Hours Total Sleep Deprivation. *Aviation, Space, Environ Med* *76*, 108-113.

- 61) Wesensten N.J., Balkin T.J., Reichardt R.M., Kautz M.A., Saviolakis G.A., **Belenky G.** (2005) Daytime sleep and performance following a zolpidem and melatonin cocktail. *Sleep* 28(1), 93-103.
- 62) Wesensten, N.J., **Belenky, G.** & Balkin, T.J. (2005) Cognitive readiness in network centric operations. *Parameters: U.S. Army War College Quarterly*, 35 (1), 94-105.
- 63) Thorne, D.R., Johnson, D.E., Redmond, D.P., Sing, H.C., **Belenky, G.** and Shapiro, J.M. (2005) The Walter Reed palm-held psychomotor vigilance test. *Behavior Research Methods, Instruments, & Computers*, 37(1), 111-118.
- 64) McLellan, TM, Kamimori, G.H. Bell, D.G. Smith, I.F. Johnson, D., **Belenky, G.** (2005) Caffeine Maintains Vigilance and Marksmanship in Simulated Urban Operations with Sleep Deprivation. *Aviat Space Environ Med* 76, 39-45.
- 65) Kamimori G.H., Johnson D, Thorne D, **Belenky G.L.** (2005) Multiple Caffeine Doses Maintain Vigilance During Early Morning Operations. *Aviat Space Environ Med* 76, 1046-1050.
- 66) A. M. Bender, A. M. Tucker, K. A. Knittle, **G. Belenky**, H. P. A. Van Dongen (2007). Slow wave activity in the first NREM episode is a trait marker in addition to a homeostatic state marker. In Ruigt, G. S. F., DeBoer, T., Van Kasteel, V., Van Luijtelaar, G., Overeem, S. (Eds.). *Sleep-Wake Research in the Netherlands*, vol. 18. Dutch Society for Sleep-Wake Research, pp. 33-36.
- 67) S. R. Webber, M. R. Sherman, A. M. Tucker, **G. Belenky**, H. P. A. Van Dongen (2007). Introversion, Type A personality, and resilience to cognitive impairment from sleep loss. In Ruigt, G. S. F., DeBoer, T., Van Kasteel, V., Van Luijtelaar, G., Overeem, S. (Eds.). *Sleep-Wake Research in the Netherlands*, vol. 18. Dutch Society for Sleep-Wake Research, pp. 131-134.
- 68) M. Oonk, A. M. Tucker, **G. Belenky**, H. P. A. Van Dongen (2008). Excessive sleepiness: determinants, outcomes, and context. *The International Journal of Sleep and Wakefulness*, in press.
- 69) H. P. A. Van Dongen, **G. Belenky** (2008). Alertness level. In U. Windhorst, M. Binder, N. Hirokawa (Eds.). *Encyclopedia of Neuroscience*. Springer, Heidelberg, in press.
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