



CURRICULUM VITAE
DAVID E. NEWMAN-TOKER, M.D., Ph.D.
February, 2010

DEMOGRAPHIC AND PERSONAL INFORMATION

Current Appointments:

University Appointments (Johns Hopkins University)

Primary Appointment: Associate Professor of Neurology, full-time (2/1/10)

Secondary Appointments (School of Medicine):

Associate Professor of Otolaryngology (Assistant 7/1/02-1/31/10)

Joint Appointment in Ophthalmology (7/1/02)

Joint Appointment in Health Sciences Informatics (7/1/02)

Joint Appointment in Emergency Medicine (7/1/06)

Secondary Appointments (Bloomberg School of Public Health):

Associate Professor of Epidemiology (4/1/03) (Assistant 7/1/02-1/31/10)

Joint Appointment in Health Policy and Management (7/1/03)

Hospital Appointments

Active Staff, Neurology, Johns Hopkins Hospital, Baltimore, MD (7/02 – present)

Courtesy Staff, Neurology, Johns Hopkins Bayview Medical Center, Baltimore, MD (7/02 – present)

Personal Data:

Johns Hopkins Hospital
Pathology Building, 2-210
Baltimore, MD 21287

410-614-1576 (W)
410-614-1746 (F)
toker@jhu.edu (email)

EDUCATION AND TRAINING (in chronological order)

1991, B.S., Yale University, Molecular Biophysics & Biochemistry

1995, M.D., University of Pennsylvania School of Medicine

1996, Intern, Harvard University/Massachusetts General Hospital, Internal Medicine

1999, Resident, Harvard University/Massachusetts General Hospital, Neurology

2000, Fellow, Harvard University/Massachusetts Eye & Ear Infirmary, Neuro-ophthalmology

2002, Fellow, The Johns Hopkins University/Johns Hopkins Hospital, Neuro-otology

2007, Ph.D., The Johns Hopkins Bloomberg School of Public Health, Clinical Investigation

PROFESSIONAL EXPERIENCE (in chronological order)

3/95-5/95: Clinical Clerk in Neurology, Institute of Neurology, Queen Square, London, UK

10/97-12/97: Clinical Clerk in Neuro-Otology, Royal Prince Alfred Hospital, Sydney, Australia

7/99-6/00: Clinical Associate in Neurology, Massachusetts General Hospital, Boston, MA

3/01-6/02: Senior Clinical Fellow in Neurology, Johns Hopkins Hospital, Baltimore, MD

7/02-1/10: Assistant Professor of Neurology, Johns Hopkins University, Baltimore, MD

8/07-10/07: Visiting Assistant Professor of Neurology, Univ. of Rochester SOM, Rochester, NY

RESEARCH ACTIVITIES

Research Publications (listed earliest to latest):

- **ISI Thompson H-index (all journal publications = 6; research publications = 5)**
- **Google Scholar H-index (all journal publications = 7; research publications = 5)**
- **16 original articles (authorship: 10 first, 4 senior, 1 second, 1 other)**
- **29 abstracts (authorship: 25 first, 1 senior)**

Peer-Reviewed Publications (original research articles) (* = corresponding author):

1. **Newman-Toker DE**, Horton JC, Lessell S. Recurrent visual loss in Leber hereditary optic neuropathy. Archives of Ophthalmology 2003 Feb; 121(2):288-291. [ISI JIF 2003 = 3.2]
2. **Newman-Toker DE***. Charted records of dizzy patients suggest ED physicians emphasize symptom quality in diagnostic assessment [research letter]. Annals of Emergency Medicine 2007 Aug; 50(2):204-5. [ISI JIF 2007 = 3.5]
3. Stanton VA, Hsieh YH, Camargo CA Jr., Edlow JA, Lovett P, Goldstein JN, Abbuhl S, Lin M, Chanmugam A, Rothman RE, **Newman-Toker DE***. Overreliance on symptom quality in diagnosing dizziness: results of a multicenter survey of emergency physicians. Mayo Clinic Proceedings 2007 Nov; 82(11):1319-1328. [ISI JIF 2007 = 4.4] [**Featured cover article with accompanying editorial**: Caplan LR. Dizziness: How do patients describe dizziness and how do emergency physicians use these descriptions for diagnosis? Mayo Clinic Proceedings. 2007;82:1313-1315]
4. **Newman-Toker DE***, Cannon LM, Stofferahn ME, Rothman RE, Hsieh YH, Zee DS. Imprecision in patient reports of dizziness symptom quality: a cross-sectional study conducted in an acute-care setting. Mayo Clinic Proceedings 2007 Nov; 82(11):1329-1340. [ISI JIF 2007 = 4.4] [**Featured cover article with accompanying editorial**: Caplan LR. Dizziness: How do patients describe dizziness and how do emergency physicians use these descriptions for diagnosis? Mayo Clinic Proceedings. 2007;82:1313-1315]
5. Cnyrim CD, **Newman-Toker DE**, Karch C, Brandt T, Strupp M. Bedside differentiation of vestibular neuritis from central "vestibular pseudoneuritis." Journal of Neurology, Neurosurgery, and Psychiatry 2008 Mar; 79:458-460. [ISI JIF 2008 = 4.6]
6. **Newman-Toker DE***, Stanton VA, Hsieh YH, Rothman RE. Frontline providers harbor misconceptions about the bedside evaluation of dizzy patients [research letter]. Acta Oto-laryngologica 2008 May;128(5):601-604. [ISI JIF 2008 = 0.9]
7. **Newman-Toker DE†**, Kattah JC†, Alvernia JE, Wang DZ. Normal head impulse test differentiates acute cerebellar strokes from vestibular neuritis. Neurology 2008 Jun;70:2378-2385. [ISI JIF 2008 = 7.0] [**60th Anniversary "Stroke and Related Disorders" subspecialty bonus issue** – "In honor of the 60th anniversary of the American Academy of Neurology, we will be publishing a Stroke subspecialty bonus issue and your paper has been selected for inclusion... this issue is not a 'supplement' but a prestige issue to comprise the latest articles on stroke... Thank you for sending us such a fine paper and congratulations on your article's being selected to appear in this 60th anniversary subspecialty issue."] [†Denotes co-first authorship].
8. **Newman-Toker DE***, Hsieh YH, Camargo CA Jr., Pelletier AJ, Butchy GT, Edlow JA. Spectrum of dizziness visits to US emergency departments: cross-sectional analysis from a nationally-representative sample. Mayo Clinic Proceedings 2008 Jul;83(7):765-775. [ISI JIF 2008 = 4.8] [Related correspondence: **Newman-Toker DE***, Camargo CA Jr., Edlow JA. Diagnosing dizziness in the emergency and primary care settings [letter to the editor]. Mayo Clinic Proceedings 2008 Nov; 83(11):1297-1299, also listed under "letters" below]
9. Hsieh YH, Rothman RE, **Newman-Toker DE**, Kelen GD. National estimation of rates of HIV serology testing in US emergency departments 1993-2005: baseline prior to the 2006 Centers for Disease Control and Prevention recommendations. AIDS 2008 Oct;22(16):2127-2134. [ISI JIF 2008 = 5.5]
10. **Newman-Toker DE***, Dy FJ, Stanton VA, Zee DS, Calkins H, Robinson KA. Primary cardiovascular disease causes true vertigo—a systematic review. Journal of General Internal Medicine 2008 Dec;23(12):2087-2094. [ISI JIF 2008 = 2.7]

11. **Newman-Toker DE***, Sharma P, Chowdhury M, Clemons TM, Zee DS, Della Santina CC. Penlight-cover test: a new bedside method to unmask nystagmus. *Journal of Neurology, Neurosurgery, and Psychiatry* 2009 Aug;80(8):900-903. [ISI JIF 2008 = 4.6]
12. **Newman-Toker DE***, Camargo CA Jr., Hsieh YH, Pelletier AJ, Edlow JA. Disconnect between charted vestibular diagnoses and emergency department management decisions: a cross-sectional analysis from a nationally-representative sample. *Academic Emergency Medicine* 2009 Oct;16(10):970-977. [ISI JIF 2008 = 2.5]
13. Kattah JC, Talkad AV, Wang DZ, Hsieh YH, **Newman-Toker DE***. HINTS to diagnose stroke in the acute vestibular syndrome: three-step bedside oculomotor exam more sensitive than early MRI diffusion-weighted imaging. *Stroke* 2009 Nov;40(11):3504-3510. [ISI JIF 2008 = 6.5] [**Winner of the Stroke Innovation Award – “Innovation” is defined broadly; it can be a new approach, a new methodology, new interpretation of existing data or new data with far reaching implications. The prize... consists of a cash award of \$2,500US, a trophy and a travel grant... to attend the International Stroke Conference of the American Heart Association.**]
14. Bisdorff A, von Brevern M, Lempert T, **Newman-Toker DE**. Classification of vestibular symptoms: towards an international classification of vestibular disorders. *Journal of Vestibular Research* 2009;19(1-2):1-13. [ISI JIF 2008 = 0.6]
15. Versino M, **Newman-Toker DE**. Blind spot heterotopia by automated static perimetry to assess static ocular torsion: centro-cecal axis rotation in normals [research letter]. *Journal of Neurology* 2009 (in press). [ISI JIF 2008 = 2.5]
16. **Newman-Toker DE**, Rizzo JR III. Subjectively-quantified Maddox rod testing improves diagnostic yield over alternate cover testing alone in patients with diplopia. *Journal of Clinical Neuroscience* (in press). [ISI JIF 2008 = 1.2]

Peer-Reviewed Scientific Abstracts (posters and platforms) (26/29 first or senior authored):

1. **Newman-Toker DE**, Rizzo JR III. Intra-arterial thrombolysis of acute central retinal artery occlusion – preliminary data and methodologic approach. Poster presentation at the North American Neuro-Ophthalmology Society Meeting, March, 2000. Abs#38 p56.
2. **Newman-Toker DE**, Newman-Toker JR, Lehmann HP, Zee DS. Proposal for a multi-layer ontology to aid in classification of vestibular disorders. Abstracts of the XXII Bárány Society Meeting. Seattle, Washington, USA. 26-29 September 2002. *J Vestib Res.* 2001-2002;11(3-5):281 (BP5.22).
3. **Newman-Toker DE**, Zee DS. Building a new model for diagnosis of dizzy patients in the Emergency Department. Abstracts of the XXII Bárány Society Meeting. Seattle, Washington, USA. 26-29 September 2002. *J Vestib Res.* 2001-2002;11(3-5):281-2 (BP5.23).
4. **Newman-Toker DE**, Rizzo JR III. Maddox Rod vs. Alternate Cover Testing in Neuro-ophthalmic Practice. Platform presentation at the North American Neuro-Ophthalmology Society Meeting, February, 2003. [*peer-reviewed publication in Journal of Clinical Neuroscience 2009*]
5. **Newman-Toker DE**. Common misconceptions in the evaluation of ED dizzy patients parallel those found in Emergency Medicine texts. Poster presentation at the Society for Academic Emergency Medicine, May, 2003. *Academic Emergency Medicine* 2003 May; 10(5):491-2. [*peer-reviewed publication in Acta-Otolaryngologica 2007*]
6. **Newman-Toker DE**. Charted records of Emergency Department dizzy patients suggest overemphasis on symptom quality may be associated with diagnostic errors. American College of Emergency Physicians Research Forum. October 12-13, 2003, Boston, Massachusetts, USA. Abstracts. *Annals of Emergency Medicine* 2003 October; 42(4 Supplement):S80 (#295). [*peer-reviewed publication in Annals of Emergency Medicine 2007*]
7. **Newman-Toker DE**, Zee DS. Common misconceptions in the evaluation of ED dizzy patients parallel those found in Emergency Medicine texts. Abstracts of the Bárány Society XXIII International Congress. Paris, France, July 7-9, 2004. *Journal of Vestibular Research* 2004; 14(2-3):230 (P084). [*peer-reviewed publication in Acta-Otolaryngologica 2008*]
8. **Newman-Toker DE**, Zee DS. Charted records of Emergency Department dizzy patients suggest overemphasis on symptom quality may be associated with diagnostic errors. Abstracts of the Bárány Society XXIII International Congress. Paris, France, July 7-9, 2004. *Journal of Vestibular Research* 2004; 14(2-3):230-1 (P085). [*peer-reviewed publication in Annals of Emergency Medicine 2007*]

9. Guardabascio LM, Rothman RE, Zee DS, **Newman-Toker DE**. Chief complaint screening – a new method for symptom-oriented research in the Emergency Department. Moderated poster presentation at the Society for Academic Emergency Medicine, May, 2006. *Acad Emerg Med* 2006 13(5 Supplement 1):S146.
10. **Newman-Toker DE**, Guardabascio LM, Zee DS, Rothman RE. Taking the history from a dizzy patient – why “What do you mean by dizzy?” should not be the first question you ask. Poster presentation at the Society for Academic Emergency Medicine, May, 2006. *Acad Emerg Med* 2006 13(5 Supplement 1):S79. [*peer-reviewed publication in Mayo Clinic Proceedings* 2007]
11. Cnyrim CD, **Newman-Toker DE**, Karch C, Brandt T, Strupp M. How to clinically differentiate between vestibular neuritis and "vestibular pseudoneuritis." Poster presentation at the European Neurological Society 16th Meeting, May 2006. [*peer-reviewed publication in Journal of Neurology, Neurosurgery, and Psychiatry* 2008]
12. **Newman-Toker DE**, Guardabascio LM, Stofferahn ME, Rothman RE, Hsieh YH, Zee DS. Rethinking the approach to the dizzy patient: why “What do you mean by dizzy?” should not be the first question you ask. Poster presentation at the North American Neuro-Ophthalmology Society Annual Meeting, February, 2007. [*peer-reviewed publication in Mayo Clinic Proceedings* 2007]
13. **Newman-Toker DE**, Guardabascio LM, Stofferahn ME, Rothman RE, Hsieh YH, Zee DS. Rethinking the approach to the dizzy patient: why “What do you mean by dizzy?” should not be the first question you ask. Platform presentation at the 59th Annual Meeting of the American Academy of Neurology, Boston, MA, USA. May, 2007. [*peer-reviewed publication in Mayo Clinic Proceedings* 2007]
14. **Newman-Toker DE**, Stanton VA, Hsieh YH, Camargo CA Jr., Edlow JA, Lovett P, Goldstein JN, Abuhl S, Lin M, Chanmugam A, Rothman RE. Diagnosing dizziness in the emergency department — physicians may rely too heavily on symptom quality. Results of a multicenter, quantitative survey. American College of Emergency Physicians Research Forum. October 8-11, 2007, Seattle, Washington, USA. Abstracts. *Annals of Emergency Medicine* 2007 October. [*peer-reviewed publication in Mayo Clinic Proceedings* 2007]
15. **Newman-Toker DE**, Dy FJ, Stanton VA, Zee DS, Calkins H, Robinson KA. Primary cardiovascular disease causes true vertigo—a systematic review. Abstracts of the Bárány Society XXV International Congress. Kyoto, Japan, March 31-April 3, 2008. *Journal of Vestibular Research* 2008. [*peer-reviewed publication in Journal of General Internal Medicine* 2008]
16. **Newman-Toker DE**, Hsieh YH, Camargo CA Jr., Pelletier AJ, Edlow JA. The spectrum of dizziness in United States emergency departments. Abstracts of the Bárány Society XXV International Congress. Kyoto, Japan, March 31-April 3, 2008. *Journal of Vestibular Research* 2008. [*peer-reviewed publication in Mayo Clinic Proceedings* 2008]
17. **Newman-Toker DE**, Camargo CA Jr., Hsieh YH, Pelletier AJ, Edlow JA. Are published parameters for diagnosis and treatment of vestibular disorders implemented in the emergency department? A cross-sectional analysis from a nationally-representative sample. Abstracts of the Bárány Society XXV International Congress. Kyoto, Japan, March 31-April 3, 2008. *Journal of Vestibular Research* (in press). [*peer-reviewed publication in Academic Emergency Medicine* 2009]
18. Bisdorff A, Bronstein A, Kingma H, Lempert T, Neuhauser H, **Newman-Toker DE**, Radtke A, von Brevern M. Building worldwide expert consensus around a glossary of vestibular symptoms—the first step towards a structured international classification of vestibular disorders. Abstracts of the Bárány Society XXV International Congress. Kyoto, Japan, March 31-April 3, 2008. *Journal of Vestibular Research* 2008. [*peer-reviewed publication in Journal of Vestibular Research* 2009]
19. Lempert T, von Brevern M, **Newman-Toker DE**, Bronstein A, Neuhauser H, Kingma H, Radtke A, Bisdorff A. Controversies in the classification of dizziness and vertigo. Abstracts of the Bárány Society XXV International Congress. Kyoto, Japan, March 31-April 3, 2008. *Journal of Vestibular Research* 2008.
20. **Newman-Toker DE**, Dy FJ, Stanton VA, Zee DS, Calkins H, Robinson KA. Primary cardiovascular disease causes true vertigo: a systematic review of observational studies. Platform presentation at the 60th Annual Meeting of the American Academy of Neurology. Chicago, USA, April 12-19, 2008. [*peer-reviewed publication in Journal of General Internal Medicine* 2008]
21. **Newman-Toker DE**, Hsieh YH, Camargo CA Jr., Pelletier AJ, Edlow JA. The spectrum of dizziness in United States emergency departments: a cross-sectional analysis from a nationally-representative sample. Platform presentation at the 60th Annual Meeting of the American Academy of Neurology, April, 2008. [*peer-reviewed publication in Mayo Clinic Proceedings* 2008]
22. **Newman-Toker DE**, Dy FJ, Stanton VA, Zee DS, Calkins H, Robinson KA. Primary cardiovascular disease causes true vertigo: a systematic review of observational studies. SAEM 2008. [*poster accepted but not presented; abstract published*] [*peer-reviewed publication in Journal of General Internal Medicine* 2008]

23. **Newman-Toker DE**, Robinson KA, Edlow JA. Emergency department misdiagnosis of cerebrovascular events in the era of modern neuroimaging: a systematic review. Poster presentation at the inaugural Diagnostic Error in Medicine meeting, May 31-June 1, 2008.
24. **Newman-Toker DE**, Robinson KA, Edlow JA. Frontline misdiagnosis of cerebrovascular events in the era of modern neuroimaging: a systematic review. Abstracts of the 133rd Annual Meeting of the American Neurological Association; Salt Lake City, UT; September 21-24, 2008. *Ann Neurol* 2008 Aug;64(Suppl 12):S17-S18.
25. Kattah JC†, **Newman-Toker DE†**, Talkad A. Skew deviation predicts brainstem involvement in the acute vestibular syndrome. Platform presentation at the North American Neuro-Ophthalmology Society Annual Meeting, Tahoe, USA, February, 2009. [*†Denotes co-first authorship*] [*peer-reviewed publication in Stroke 2009*]
26. Kattah JC†, **Newman-Toker DE†**, Talkad A. Skew deviation predicts brainstem involvement in the acute vestibular syndrome. Platform presentation at the 61st Annual Meeting of the American Academy of Neurology. Seattle, USA, April 25-May 2, 2009. [*†Denotes co-first authorship*] [*peer-reviewed publication in Stroke 2009*]
27. **Newman-Toker DE**, Robinson KA, Edlow JA. Emergency department misdiagnosis of cerebrovascular events in the era of modern neuroimaging: a systematic review. Poster presentation at the 61st Annual Meeting of the American Academy of Neurology. Seattle, USA, April 25-May 2, 2009.
28. **Newman-Toker DE**, Butchy GT, Lehmann HP, Aldrich EM, Chanmugam A, Frick KD. Diagnostic decision support to reduce stroke misdiagnosis among acutely dizzy patients: a cost effectiveness analysis. Poster presentation at the 61st Annual Meeting of the American Academy of Neurology. Seattle, USA, April 25-May 2, 2009.
29. **Newman-Toker DE**, Kattah JC. Acute vestibular syndrome—oculomotor signs more sensitive for stroke than MRI. Poster and platform presentation at the 134th Annual Meeting of the American Neurological Association. Baltimore, USA, October 11-14, 2009. [*peer-reviewed publication in Stroke 2009*]

Extramural Funding (current, pending, previous):

Grants/Contracts/Other (Current)

Dates: 9/1/08-8/31/09 (NCE through 8/31/10)
 Title: **Automated Medical Interviewing for Diagnostic Decision Support in the Emergency Department**
 Identification Number: HS017755-01
 Sponsor: AHRQ (R03) (NOT-HS-08-002; PAR-06-448)
 Total Direct Cost: \$80,000
 Principal Investigator: David E. Newman-Toker, M.D., Ph.D.
 Role: Principal investigator

Dates: 2/1/09-1/31/10
 Title: **Detection of Early Neurological Diseases in HIV-Positive Emergency Department Patients**
 Identification Number: Developmental grant mechanism
 Sponsor: JHU NIMH Center for Novel Therapeutics of HIV-associated Cognitive Disorders
 Total Direct Cost: \$38,000
 Principal Investigator: Yu Hsiang-Hsieh, Ph.D.
 Role: Co-Investigator

Grants/Contracts/Other (Pending)

Dates: 9/1/10-8/31/15
 Title: **Computer-Assisted Interview System to Prevent Critical Misdiagnosis in the Emergency Department – Diagnostic Decision Support for the 21st Century**
 Identification Number: RFA-RM-08-014
 Sponsor: NIH (NIH Director's New Innovator Award Program [DP2])
 Total Direct Cost: \$1,500,000
 Principal Investigator: David E. Newman-Toker, M.D., Ph.D.

Role: Principal investigator
Dates: 1/1/11-12/31/13
Title: **ADVISER—Multicenter Comparative Effectiveness Trial to Reduce Stroke Misdiagnosis**
Identification Number: RFA-HS-10-003
Sponsor: AHRQ (ARRA Clinical and Health Outcomes Initiative in Comparative Effectiveness [CHOICE] Grants, R01)
Total Direct Cost: \$5,294,676 (\$10,000,000 total costs)
Principal Investigator: David E. Newman-Toker, M.D., Ph.D.
Role: Principal investigator

Dates: 6/1/10-5/31/13
Title: **A Multiyear Grant to Support the Diagnostic Error in Medicine (DEM) Annual Conference**
Identification Number: PAR-09-257
Sponsor: AHRQ (Grant Program for Large or Recurring Conferences, R13)
Total Direct Cost: \$300,000 (\$300,000 total costs)
Principal Investigator: David E. Newman-Toker, M.D., Ph.D.
Role: Principal investigator

Grants/Contracts/Other (Previous)

Dates: 7/1/01-6/30/02
Title: **Biomedical Engineering Training Grant for Vestibular Research**
Identification Number: NRSA 5 T32 DC00023
Sponsor: NIH
Total Direct Cost: \$42,348
Principal Investigator: Murray Sachs, Ph.D.
Role: Trainee
Notes: NRSA training grant resulted in 2 discrete abstract/poster presentations about dizziness diagnosis at an international meeting and successful K23 grant award submission

Dates: 7/1/02-6/30/03
Title: **Building a New Model for Diagnosis of ED Dizzy Patients**
Identification Number: FERNE Research Seed Grant
Sponsor: FERNE (Foundation for Education and Research in Neurologic Emergencies)
Total Direct Cost: \$5,000
Principal Investigator: David E. Newman-Toker, M.D.
Role: Principal investigator
Notes: resulted in publication of 4 posters and 2 manuscripts describing pilot research studies about dizziness diagnosis (see www.ferne.org – link to Newman-Toker publications on left – accessed 12/1/07)

Dates: 12/1/02-11/30/07 (NCE to 6/30/09)
Title: **Building a New Model for Diagnosis of ED Dizzy Patients**
Identification Number: 1K23RR17324-01
Sponsor: NIH (NCRR)
Total Direct Cost: \$681,908
Principal Investigator: David E. Newman-Toker, M.D. (Ph.D. – *degree obtained 5/07*)
Role: Principal investigator
Notes: K23 award led to the largest cross sectional & cohort study of dizzy patients ever conducted in the emergency department (>500 subjects, 2-site, Baltimore) as well as a multi-center, national survey of emergency physicians (>400) and several national and international collaborations on other related projects. In turn, these studies have thus far resulted in 18 different abstract (poster or platform) presentations about dizziness at 14 national and 3 international meetings, 11 original research articles, 1 seminal case report, and 1 high-profile review about

diagnosis of cerebellar infarction, 16 invited Grand Rounds research presentations nationwide about dizziness, and completion of a Ph.D. in Clinical Investigation.

Dates: 12/1/08-11/30/09
Title: **Automated Medical Interviewing for Diagnostic Decision Support**
Identification Number: Advanced Translational Incubator Program
Sponsor: Johns Hopkins Institute for Clinical and Translational Research
Total Direct Cost: \$50,000
Principal Investigator: David E. Newman-Toker, M.D., Ph.D.
Role: Principal investigator

Research Program Building/Leadership:

National and International Committees (also listed with professional societies, committees)

- 10/07-present: International Bárány Society (2007-present, working group member) (Committee for the Classification of Vestibular Disorders of the Bárány Society (10/07-present)) [*this group is working on developing research criteria for vestibular disorders, similar to those developed by the International Headache Society for headache disorders*]
- 7/08-present: Diagnostic Error in Medicine 2009 Conference (2nd Annual), Planning Committee Member; 2010 Conference (3rd Annual), Meeting Chair [*among other issues related to diagnostic errors, this group will be helping to plan a recommended national agenda for diagnostic errors research*]
- 11/08: NIH roundtable on Opportunities to Advance Research on Neurological and Psychiatric Emergencies, sponsored by NINDS (panelist, discussant, co-author of summary/white paper document/manuscript)

EDUCATIONAL ACTIVITIES

Educational Publications:

- ISI Thompson H-index (all journal publications = 6; educational publications = 5)
- Google Scholar H-index (all journal publications = 7; educational publications = 5)
- 17 publications in refereed journals (* = *corresponding author*)
 - Includes 7 peer-reviewed, 10 editorial review (including 4 invited, 3 letters)
 - Includes 8 first-authored, 4 senior-authored, 2 second-authored, 3 other
- 2 meeting proceeding case reports (peer-reviewed, published in proceedings/online)
- 2 book chapters
- 1 book (doctoral dissertation)
- 1 online web-based educational materials publication
- Among 10 case reports, 5 senior/corresponding with student or resident first

Peer-Reviewed Publications (e.g. consensus statements, expert opinions)

1. Edlow JA, **Newman-Toker DE**, Savitz SI. Diagnosis and initial management of cerebellar infarction. *Lancet Neurology* 2008 Oct;7:951-64. [ISI JIF 2008 = 14.3] [*critical literature review; peer-reviewed*]
2. **Newman-Toker DE***, Pronovost PJ. Diagnostic Errors: The Next Frontier for Patient Safety. *JAMA* 2009 Mar; 301(10):1060-62. [ISI JIF 2008 = 28.0] [*commentary drawing attention to diagnostic error and highlighting systems-oriented solutions; peer-reviewed*] (*resulting in press release and national public radio interview*) [Related correspondence: **Newman-Toker DE***, Pronovost PJ. Diagnostic Errors and Patient Safety – Reply [letter to the editor]. *JAMA* 2009 Jul; 302(3):259-260, *also listed under "letters" below*]

Invited Reviews/Other Invited Articles

1. **Newman-Toker DE**, Rizzo J. Neuro-ophthalmic diseases masquerading as 'benign' strabismus. *International Ophthalmology Clinics* 2001 Fall; 41(4):115-27. [ISI JIF 2001 = 0.5] [*invited literature review, editorial review*]

2. **Newman-Toker DE***. Time management top 10 list. *Journal of Investigative Medicine*. 2004 May; 52(4):262-4. [ISI JIF 2004 = 2.0] [*invited article following meeting presentation for junior faculty and research trainees about work-life balance, AFMR 2003, editorial review*]
3. **Newman-Toker DE***, Pham JC, Winters BD, Pronovost PJ. Diagnostic Errors in Critical Care Settings – Managing Information Overload. *ICU Management* 2009 Summer; 9(2):6-11. [ISI JIF N/A]
4. Lynn JD, Ali I, Isaacson RS, **Newman-Toker DE**. ACE Journal Watch from ACE (Alliance For Clinical Education): Review of medical education articles in neurology 2007–2008. *Teaching and Learning in Medicine: An International Journal* 2009; 21(4):351-354. [ISI JIF 2008 = 0.7]

Editorials

None.

Case Reports (8 journal publications [5 peer reviewed]; 2 meeting proceeding presentations)

1. Kelly PJ, **Toker DE**, Boyer P, McDonald CT, Niles J. Granulomatous compressive thoracic myelopathy as the initial manifestation of Wegener's granulomatosis. *Neurology* 1998; 51(6): 1769-1770. [ISI JIF 1998 = 5.0] [*note: pre-marriage last name "Toker"*]
2. Kaiser UB, Hedley-Whyte ET, Wolsko L, Schaefer PW, Greicius MD, **Toker DE**. Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 15-2001. A 72-year-old man with persistent fever and hypotension. *The New England Journal of Medicine*. 2001;344:1536-1542. [ISI JIF 2001 = 29.1] [*editorial review only*] [*note: pre-marriage last name "Toker"; also note PubMed lists no authors; ISI Thompson gives complete author list*]
3. Bienfang DC, Karluk D, Buchbinder BR, **Toker DE**, Durand ML, Hedley-Whyte ET, Scully RE. Case 9-2002 - An 80-Year-Old Woman with Sudden Unilateral Blindness. *The New England Journal of Medicine*. 2002;346:924-929. [ISI JIF 2002 = 31.7] [*editorial review only*] [*note: pre-marriage last name "Toker"; also note PubMed lists only first two authors; ISI Thompson gives complete author list*]
4. Seidel G, Pardo CA, **Newman-Toker D**, Olivi A, Eberhart CG. Neurobrucellosis presenting as leukoencephalopathy: the role of cytotoxic T lymphocytes. *Archives of Pathology and Laboratory Medicine*. 2003 Sep; 127(9):e374-377. [ISI JIF 2003 = 1.3]
5. Wilson R, Pardo-Villamizar C, **Newman-Toker DE***. When a fine diagnosis isn't good enough. Walsh Society Meeting, February, 2005. [*peer-reviewed platform case presentation of Hodgkin lymphoma presenting as paraneoplastic encephalitis with ocular flutter by DNT; published in meeting proceedings and on NOVEL website <http://library.med.utah.edu/NOVEL>*]
6. **Newman-Toker DE***, Camargo CA Jr. 'Cardiogenic Vertigo'—True vertigo as the presenting manifestation of primary cardiac disease. *Nature Clinical Practice Neurology* 2006 Mar; 2(3):167-172. [ISI JIF 2006 = 0.6] [*seminal case report; peer-reviewed*]
7. Castle J, Sakonju A, Dalmau J, **Newman-Toker DE***. Anti-Ma2-associated encephalitis with normal FDG-PET: a case of pseudo-Whipple's disease. *Nature Clinical Practice Neurology* 2006 Oct; 2(10):566-572. [ISI JIF 2006 = 0.6] [*peer-reviewed case report with review of pertinent literature*]
8. Sakonju A, **Newman-Toker DE***. You shake my nerves and you rattle my brain. Walsh Society Meeting, February, 2007. [*peer-reviewed platform case presentation of seminoma presenting as anti-Ma-2 paraneoplastic encephalitis with opsoclonus by AS; published in meeting proceedings and on NOVEL website <http://library.med.utah.edu/NOVEL>*] [*note: also published as case report Castle et al., listed above*]
9. Cheong R, Wilson RK, Cortese ICM, **Newman-Toker DE***. Mothball Withdrawal Encephalopathy – Case Report and Review of Paradichlorobenzene Neurotoxicity. *Substance Abuse* 2007 Mar; 27(4):63-67. [ISI JIF N/A] [*peer-reviewed case report with review of pertinent literature*]
10. Levy M, **Newman-Toker DE***. Reversible chest tube Horner syndrome. *Journal of Neuro-ophthalmology* 2008 Sep; 28(3):212-3. [ISI JIF 2008 = 1.3] [*editorial review only*] [*case report with photo essay illustrating thoracic anatomy of Horner syndrome*]

Letters, correspondence

1. **Newman-Toker DE***, Reich SG. "Wrong-way" nystagmus in the AICA syndrome [letter to the editor]. *Laryngoscope* 2008 Feb; 118(2):378-379. [ISI JIF 2008 = 1.9] [*pointing out errors in understanding and teaching about nystagmus; editorial review*]

2. **Newman-Toker DE***, Camargo CA Jr., Edlow JA. Diagnosing dizziness in the emergency and primary care settings [letter to the editor]. *Mayo Clinic Proceedings* 2008 Nov; 83(11):1297-1299. [ISI JIF 2008 = 4.8] [response to frontline providers about the approach to dizziness in primary care as opposed to emergency medical settings; editorial review]
3. **Newman-Toker DE***, Pronovost PJ. Diagnostic Errors and Patient Safety – Reply [letter to the editor]. *JAMA* 2009 Jul; 302(3):259-260. [ISI JIF 2008 = 28.0] [response to letters about board certification and education as tools to reduce diagnostic error; editorial review]

Book Chapters and Monographs

1. Zee DS, **Newman-Toker DE**. Supranuclear and Internuclear Ocular Motor Disorders. In Walsh and Hoyt's *Clinical Neuro-Ophthalmology*, 6th edition. Editors, Miller NR, Newman NJ, Biousse V, Kerrison JB. Baltimore, Lippincott-Williams & Wilkins, 2005.
2. Solomon D, **Newman-Toker DE**, Durmer JS. Dizziness and Vertigo in Older Adults. In *Clinical Neurology of the Older Adult*, 2nd edition. Editors, Sirven JI and Malamut BL. Philadelphia, Lippincott Williams & Wilkins, 2008. ISBN-10: 0781769477. ISBN-13: 978-0781769471.

Books, Textbooks

1. **Newman-Toker DE**. *Diagnosing Dizziness in the Emergency Department—Why "What do you mean by 'dizzy'?" Should Not Be the First Question You Ask* [Doctoral Dissertation, Clinical Investigation, Bloomberg School of Public Health]. Baltimore, MD: The Johns Hopkins University; 2007. In: ProQuest Digital Dissertations [database on Internet, <http://www.proquest.com/>]; publication number: AAT 3267879. Available at: http://gateway.proquest.com/openurl?url_ver=Z39.88-2004&res_dat=xri:pqdiss&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&rft_dat=xri:pqdiss:3267879. Accessed September 2, 2008.

Other Media (films, videos, CD-ROMs, slide sets, etc.)

1. **Newman-Toker DE**. Skew Deviation and the Ocular Tilt Reaction (slides, published on the web-based, open access Neuro-ophthalmology Virtual Education Library [NOVEL], University of Utah, <http://library.med.utah.edu/NOVEL/>, 12/05).

Education-Related Peer Review:

- 6/07-present: Grant Reviewer, AAN Education Research Subcommittee
- 2/08-3/08: Reviewer for American Academy of Ophthalmology (AAO) curriculum (COMPASS project), 7 neuro-ophthalmology topics in ocular motility disorders

Teaching:

Total Teaching & Educational Program Building (since joining JHUSOM faculty 7/02)

>1000 hours of face-time didactic classroom teaching and mentoring of medical students
>4000 hours of academic administration and curriculum development activities

Classroom instruction (dates, course title, role, location)

Current Didactic, Classroom Teaching Per Year ('Face Time' Only): ~110-120 hrs per year

(~30-35 hours 1st & 2nd year medical students, ~70-75 hours 3rd & 4th year medical students, ~4-6 hours Neurology residents, ~2-5 hours local community attending physicians)

INSTRUCTION AT MEDICAL STUDENT LEVEL (WITHIN JHMI):

JHU SOM 1st-Year Neuroscience Course (Lecturer, Small Group Leader)

Feb.-March, 2003: Guest lecturer & laboratory instructor (Brainstem Lab, Vestibular Lab)
Feb.-March, 2004: Discussion-group leader (clinical case correlations, 3 sessions, 1 hr each)
Feb.-March, 2005: Discussion-group leader (clinical case correlations, 5 sessions, 1 hr each)
Feb.-March, 2006: Discussion-group leader (clinical case correlations, 1 session, 1 hr)

Feb.-March, 2009: Discussion-group leader (clinical case correlations, 2 sessions, 2 hrs)

JHU SOM 2nd-Year Pathophysiology Course, Neuro Block (Lecturer, Small Group Leader)

February, 2002: Laboratory instructor (10 sessions, 19.5 hrs)

Jan.-Feb., 2003: Course co-director, lab instructor (10 sessions, 19 hrs), lecturer (3.5 lect hrs)

“Localization in Neurology: Functional Pathoanatomy”

“Migraine and Other Headache Syndromes”

“Neuropathology-Pathophysiology Structured Review”

Jan.-Feb., 2004: Course co-director, lab instructor (9 sessions, 15 hrs), lecturer (4.5 lect hrs)

“Functional Neuroanatomy of the Brainstem & Cranial Nerves”

“Localization in Neurology: Functional Pathoanatomy”

“Migraine and Other Headache Syndromes”

“Neuropathology-Pathophysiology Structured Review”

Proctor, Student Written Examination

Jan.-Feb., 2005: Course co-director, lab instructor (10 sessions, 21 hrs), lecturer (6.5 lect hrs)

“Functional Neuroanatomy of the Brainstem & Cranial Nerves”

“Localization in Neurology: Functional Pathoanatomy”

“Migraine, Tension, and Other Headaches”

“Vestibular Pathophysiology: Understanding Nystagmus”

“Neuropathology-Pathophysiology Structured Review”

Jan.-Feb., 2006: Course Director, lab instructor (8 sessions, 16.5 hrs), lecturer (10.5 lect hrs)

“Course Introduction & Overview of Functional Neuroanatomy”

“Functional Neuroanatomy of the Brainstem & Cranial Nerves”

“Localization in Neurology: Functional Pathoanatomy”

“Dizziness, Vertigo, and the Pathophysiology of Nystagmus”

“Patho-Anatomy of Neuro-ophthalmic Signs in Cerebrovascular Disease”

“Headaches Syndromes and the Pathophysiology of Migraine Pain”

“Episodic Neurologic Symptoms - Channelopathies & Beyond”

“Neuropathology-Pathophysiology Structured Review”

Feb.-Mar., 2007: Course Director, lab instructor (9 sessions, 18.5 hrs), lecturer (10.5 lect hrs)

“Course Introduction & Overview of Functional Neuroanatomy”

“Functional Neuroanatomy of the Brainstem & Cranial Nerves”

“Localization in Neurology: Functional Pathoanatomy”

“Patho-Anatomy of Neuro-ophthalmic Signs in Cerebrovascular Disease”

“Headaches Syndromes and the Pathophysiology of Migraine Pain”

“Dizziness, Vertigo, and the Pathophysiology of Nystagmus”

“Episodic Neurologic Symptoms - Channelopathies & Beyond”

“Neuropathology-Pathophysiology Structured Review”

Feb.-Mar., 2008: Course Director, lab instructor (9 sessions, 18.5 hrs), lecturer (9.75 lect hrs)

“Course Introduction & Overview of Functional Neuroanatomy”

“Localization in Neurology: Functional Pathoanatomy”

“Headaches Syndromes and the Pathophysiology of Migraine Pain”

“Vertigo and the Pathophysiology of Bedside Vestibular Eye Signs”

“TNDs, TIAs, & Neuro-electrical Auras: Pathogenesis of Episodic Neurologic Symptoms”

“Neuropathology-Pathophysiology Structured Review”

Feb.-Mar., 2009: Course Director, lab instructor (8 sessions, 16.5 hrs), lecturer (10 lect hrs)

“Course Introduction & Overview of Functional Neuroanatomy”

“Localization in Neurology: Functional Pathoanatomy”

“Cerebrovascular Disease: Pupil & Eye Movement Findings”

“Dangerous Causes of Headaches”

“Vertigo and the Pathophysiology of Bedside Vestibular Eye Signs”

“TNDs, TIAs, & Neuro-electrical Auras: Pathogenesis of Episodic Neurologic Symptoms”

“Neuropathology-Pathophysiology Structured Review”

Dec., 2009: Course Director, lab instructor (9 sessions, 18.5 hrs), lecturer (10 lect hrs)

“Course Introduction & Overview of Functional Neuroanatomy”

“Localization in Neurology: Functional Pathoanatomy”

“Cerebrovascular Disease: Pupil & Eye Movement Findings”

“Dangerous Causes of Headaches”

“Vertigo and the Pathophysiology of Bedside Vestibular Eye Signs”

“TNDs, TIAs, & Neuro-electrical Auras: Pathogenesis of Episodic Neurologic Symptoms”
“Neuropathology-Pathophysiology Structured Review”

JHU SOM 2nd-Year Pathophysiology Course, Pain Block (Guest Small Group Leader)

March, 2007: Small-group case session on headache (1hr)

JHU SOM Clinical Skills Course (Lecturer)

February, 2002: Neurology Clinical Skills Instructor, Small Group (3 sessions)
October, 2002: Lecturer (1 lecture)
“Introduction to the Neurologic History & Physical Examination”
October, 2003: Lecturer (1 lecture)
“Introduction to the Neurologic History & Physical Examination”
October, 2004: Lecturer (1 lecture)
“Introduction to the Neurologic History & Physical Examination”
October, 2005: Lecturer (1 lecture)
“Introduction to the Neurologic History & Physical Examination”
Guest Small Group Clinical Skills Instructor (The Neurologic Exam)

JHU SOM 3rd-Year Neurology Clerkship (10 cycles/year) (Lecturer, Small Group Leader)

October, 2001: Guest instructor, bedside patient presentations (2 sessions)
April-Aug., 2003: Small group leader, patient case presentations (4 sessions monthly)
Jan.-Aug., 2004: Small group leader, ‘Searching the Medical Literature’ (1 session monthly)
Sept., 2003-pres: Clerkship introduction (5 cycles/yr until 9/09 then 10 cycles/yr; previously 0.5hrs now 1hr)
Sept., 2003-pres: Small group leader, patient case presentations (~3 sessions monthly)
Sept., 2003-pres: Lecturer (4 lecture hours monthly)
“Neurologic Emergencies”
“History-Taking in Neurology”
“Dizziness” (substituted TBL 2/09)
“Headaches” (substituted TBL 9/09)
Feb., 2009-pres: Team-based learning leader (3 lecture hours monthly 2/09-7/09; 6 hours monthly 9/09-pres.)
“Dizziness” TBL (2/09-pres.)
“Headaches” TBL (9/09-pres.)
Mar., 2009: Substitute lecturer: “Coma Exam”

JHU SOM 3rd-Year Ophthalmology Clerkship (5 cycles/year) (Lecturer)

9/05-6/07: Lecturer “Optic Disc Edema & Optic Neuropathies” (5 cycles/year)
Sept., 2007-pres: Lecturer “Optic Disc Edema & Optic Neuropathies” (~2-3 cycles/year)

JHU SOM Other (Lecturer/Discussant)

3/03: CPC Discussant, “A woman with AIDS, decreased alertness, and focal neurologic deficits”
(JHH, Department of Internal Medicine, Clinico-pathologic Case Conference)
5/3/06: Herlong Rounds, “A 90 year-old woman with episodic vertigo and syncope” (JHU SOM,
M.D.-Ph.D. Case Session, Herlong Rounds)

INSTRUCTION AT MEDICAL STUDENT LEVEL (OUTSIDE JHMI):

University of Pennsylvania SOM Clinical Skills Course (Small Group Leader)

Spring, 1994: Clinical Skills Instructor, Small Group (6 sessions)

Harvard Univ. SOM 3rd-Year Neurology Clerkship, Mass. General Hospital (Lecturer)

Summer, 1997: Course organizer and lecturer (12 lectures)

Harvard Univ. SOM 2nd-Year Nervous System & Behavior Course (Lecturer, Lab Leader)

Sept.-Nov., 1997: Laboratory instructor (8 sessions), lecturer (3 lectures)
“Basic Anatomy of the Afferent Visual System”
“Basic Anatomy of the Brainstem: The Oculomotor System”
“Basic Anatomy of the Brainstem: The Lower Cranial Nerves”
October, 1999: Guest lecturer (1 lecture)

“Basic Anatomy of the Afferent Visual System”

Rochester Univ. SOM 2nd-Year Mind-Brain-Behavior Course (Lab Leader, PBL Tutor)

Aug.-Oct., 2007: Laboratory instructor (14 sessions, 28 hrs), PBL Tutor (9 cases, 46 hrs)

Rochester Univ. SOM 2nd-Year Ambulatory Clerkship (Neuro Clinical Skills Leader)

Aug.-Oct., 2007: Neuro Skills Training Leader (8 hrs)

INSTRUCTION AT RESIDENT LEVEL (WITHIN JHMI):

Johns Hopkins Hospital Emergency Medicine Resident Lecture Series (Lecturer)

“Evaluation of Dizziness in the Emergency Ward” (12/00)
“Transient Neurologic Dysfunction: When to Worry” (1/01)
“A New Approach to Evaluation of the Dizzy Patient” (3/04)
“Diagnosing the Acutely Dizzy Patient – A New Approach” (7/09)

Johns Hopkins Hospital Neurology Resident Lecture Series (Lecturer)

“Nystagmus and Related Oscillatory Eye Movement Disorders” (10/01)
“The Neuroanatomy of Primary Supranuclear Oculomotor Control Mechanisms” (4/02)
“The Neuroanatomy of Adaptive Supranuclear Oculomotor Control Mechanisms” (5/02)
“Brainstem Neuroanatomy Made Ridiculously Simple” (8/02)
“Bedside Evaluation of Ocular Motility Disorders” (8/02)
“Oculomotor Anatomy I – Horizontal Eye Movements (Basic)” (8/02)
“Oculomotor Anatomy II – Horizontal Eye Movements (Advanced)” (8/02)
“Transient Neurologic Deficits” (8/03)
“Diplopia” (8/03)
“Diplopia” (5/04)
“Brainstem Anatomy” (8/04)
“Oculomotor Anatomy I – Horizontal Eye Movements” (8/04)
“Oculomotor Anatomy II – Vertical Eye Movements” (8/04)
“Oculomotor Anatomy III – Torsional Eye Movements” (8/04)
“Dangerous Headaches – What’s NOT Migraine?” (8/04)
“Neurology of Eye Movements I: The Oculomotor Plant” (10/05)
“Neurology of Eye Movements II: Saccades & Vergence” (10/05)
“Neurology of Eye Movements III: Smooth Pursuit & VOR” (10/05)
“Neurology of Eye Movements V: Ocular Tilt & Skew Deviation” (11/05)
“Neurology of Eye Movements I: Saccades, Smooth Pursuit & VOR” (1/08)
“Neurology of Eye Movements II: Ocular Tilt & Skew Deviation” (1/08)
“Acute Vision Loss” (7/08)
“Optic Neuropathies and Visual Field Interpretation” (1/09)
“Diagnosing the Acutely Dizzy Patient – A New Approach” (5/09)
“Skew Deviation and the Ocular Tilt Reaction” (6/09)
“Acute Vision Loss” (7/09)

JHU SOM Other (Lecturer/Discussant)

3/9/05: Chairman’s Rounds, “A woman with recurrent falls and progressive cognitive decline”
(JHBMC, Department of Neurology, Chairman’s Rounds)

INSTRUCTION AT RESIDENT LEVEL (OUTSIDE JHMI):

Massachusetts General Hospital Neurology Resident Lecture Series (Lecturer)

“Evaluation of Acute Dizziness in the Emergency Ward” (10/98)
“Double Vision – A Practical Approach to Bedside Diagnosis” (8/01 – Guest Lecturer)

Massachusetts General Hospital Internal Medicine Residents (Conference Moderator)

“A patient with transient visual loss” (8/01 – Conference Moderator, Resident Report)

Massachusetts Eye & Ear Infirmary Ophthalmology Resident Lecture Series (Lecturer)

“Hysteria & Functional Visual Loss” (8/99)

"Migraine: Current Concepts & Clinical Approach" (6/00)

Great Lakes Neuro-Ophthalmology Conference, Michigan State Univ. (Guest Lecturer)

"Clinically-Relevant Neuroanatomy of Horizontal Gaze Pathways" (4/11/08)

"Vertigo and the Pathophysiology of Bedside Vestibular Eye Signs" (4/11/08)

University of Maryland Neurology Resident Lecture Series (Guest Lecturer)

"Triage and Initial Management of the Acutely Dizzy Patient" (8/14/08)

Clinical instruction (dates, course title, role, location)

Clinical Teaching:

7/01-8/03, Neurology Clerkship, Outpatient Clinic Attending, JHUSOM, 0.5 days per week

8/02-present, Neurology Clerkship, Inpatient Ward/Consult Attending: ~4 weeks per year

Clinical Case Conferences:

1. 8/01: Conference Moderator, "A patient with transient visual loss" (Massachusetts General Hospital, Departments of Internal Medicine, Resident Report) [*also listed above under resident instruction*]
2. 10/02: Case Conference, "Dizziness with mixed central & peripheral features" (JHU SOM, Departments of Neurology & Otolaryngology, Neuro-otology Conference)
3. 3/03: CPC Discussant, "A woman with AIDS, decreased alertness, and focal neurologic deficits" (JHH, Department of Internal Medicine, Clinico-pathologic Case Conference) [*also listed above under medical student instruction*]
4. 5/03: Case Conference, "A woman with trouble standing out of proportion to trouble walking" (JHH, Depts. of Neurology & Otolaryngology, Neuro-otology Conference)
5. 11/07/03: Case Conference, "A woman with worsening imbalance, multiple falls, & bifacial weakness" (JHH, Depts. of Neurology & Otolaryngology, Neuro-otology Conference)
6. 11/07/03: Case Conference, "A man with progressive imbalance, trouble reading, & cognitive decline" (JHH, Depts. of Neurology & Otolaryngology, Neuro-otology Conference)
7. 3/9/05: Chairman's Rounds, "A woman with recurrent falls and progressive cognitive decline" (JHBMC, Department of Neurology, Chairman's Rounds) [*also listed above under resident instruction*]
8. 5/3/06: Herlong Rounds, "A 90 year-old woman with episodic vertigo and syncope" (JHU SOM, M.D.-Ph.D. Case Session, Herlong Rounds) [*also listed above under medical student instruction*]
9. 8/4/09: Chairman's Rounds, "A patient with unusual white matter pathology." (JHH, Department of Neurology, Chairman's Rounds). [*also listed above under resident instruction*]

CME instruction (dates, course title, role, location)

12/01: Current Concepts in Ophthalmology 2001

"Neuro-ophthalmic Diseases Masquerading as Benign Strabismus"
(Wilmer Eye Institute, Department of Ophthalmology)

12/02: Neurology for the Primary Care Provider 2002

"A New Approach to Evaluation of the Dizzy Patient"
"CNS Neurodiagnostics"
(Johns Hopkins University-Sponsored CME Course)

12/03: Neurology for the Primary Care Provider 2003

"A New Approach to Evaluation of the Dizzy Patient"
"CNS Neurodiagnostics"
(Johns Hopkins University-Sponsored CME Course)

12/04: Current Concepts in Ophthalmology 2004

"Maddox Rod Testing in Patients with Diplopia – Does it Help?"
(Wilmer Eye Institute, Department of Ophthalmology CME Course)

12/04: Neurology for the Primary Care Provider 2004

“A New Approach to Evaluation of the Dizzy Patient”
“CNS Neurodiagnostics”
(Johns Hopkins University-Sponsored CME Course)

5/05: Topics in Clinical Medicine 2005
“Meet the Professor” Roundtable Discussion – Neurology/Dizziness
(Johns Hopkins University-Sponsored CME Course)

12/05: Current Concepts in Ophthalmology 2005
“Office Differentiation of Skew Deviation from 4th Nerve Palsy”
(Wilmer Eye Institute, Department of Ophthalmology CME Course)

12/05: Neurology for the Primary Care Provider 2005
“Triage and Initial Management of the Acutely Dizzy Patient”
(Johns Hopkins University-Sponsored CME Course)

12/05: Neurology for the Neurologist 2005
“Triage and Initial Management of the Acutely Dizzy Patient”
(Johns Hopkins University-Sponsored CME Course)

5/06: Topics in Clinical Medicine 2006
“Meet the Professor” Roundtable Discussion – Neurology/Dizziness
(Johns Hopkins University-Sponsored CME Course)

5/06: Hot Topics 2006 – Emergency Neurology
“Emergency Evaluation of the Acutely Dizzy Patient”
(Medical University of Ohio-Sponsored CME Course, Invited Guest Professor)

12/06: Current Concepts in Ophthalmology 2006
“The World is Shaking’ – Differential Diagnosis of Oscillopsia”
(Wilmer Eye Institute, Department of Ophthalmology CME Course)

12/06: Neurology for the Primary Care Provider 2006
“Triage and Initial Management of the Acutely Dizzy Patient”
(Johns Hopkins University-Sponsored CME Course)

12/06: Neurology for the Neurologist 2006
“Triage and Initial Management of the Acutely Dizzy Patient”
(Johns Hopkins University-Sponsored CME Course)

1/07: University of Maryland Health Center Annual CME Course 2007
“Triage and Initial Management of the Acutely Dizzy Patient”
(University of Maryland-Sponsored CME Course)

5/07: GBMC’s Current Concepts in Adult Stroke 2007
“When is Acute Dizziness a Cerebrovascular Problem?”
(Greater Baltimore Medical Center-Sponsored CME Course)

11/07: Pri-Med Annual Current Clinical Issues in Primary Care CME Course 2007
“The Acutely Dizzy Patient: When is it a Cerebrovascular Problem?”
(Harvard University and Johns Hopkins University-Affiliated CME Course)

3/08: NANOS 2008 Stroke Symposium
“When is Dizziness Acute Dizziness a Cerebrovascular Problem? *The Eyes Have It*”
(North American Neuro-Ophthalmology Society Annual Meeting 2008, CME Symposium)

9/08: MAPA Trends in Patient Management 2008
“Workup of the Acute Dizzy Patient: *When is it a Cerebrovascular Problem?*”
(Maryland Academy of Physician Assistants, Annual Meeting 2008, CME Symposium)

4/10: AAN Neuro-otology Course 2009 (8AC.007)
"Transient spontaneous dizziness"
(American Academy of Neurology, Annual Meeting 2010, CME Course)

4/10: AAN Neuro-otology Course 2009 (8AC.007)
"Acute vestibular syndrome"
(American Academy of Neurology, Annual Meeting 2010, CME Course)

4/10: AAN Neuro-otology Course 2009 (8AC.007)
"Case unknowns"
(American Academy of Neurology, Annual Meeting 2010, CME Course)

Faculty Development/Education Workshops/Seminars (dates, course title, role, location)

3/06: NANOS Faculty Development Seminar Series
"Advanced PowerPoint – Enhancing Learning with Animations and More" (demo & workshop)

2/07: NANOS Faculty Development Seminar Series
"Advanced PowerPoint – Enhancing Learning with Animations and More" (demo & workshop)

12/06: JHMI Faculty Development Seminar Series
"Effective and Efficient Outpatient Clinical Teaching – a Primer and Panel Discussion" (organizer, panelist, and moderator for resident/faculty development lecture [P.Thomas], panel)

3/08: JHMI Faculty Development Seminar Series
"Advanced PowerPoint Skills – Animations to Enhance Education" (demo and workshop)

6/08: JHMI Genes to Society Curriculum Retreat
"Team-Based Learning Workshop" (co-led with Dean Parmelee)

10/08: JHMI Faculty Development Seminar Series
"Advanced PowerPoint Skills – Animations to Enhance Education" (demo and workshop)

Clinical Workshops/Seminars (dates, course title, role, location)

3/08: NANOS 2008 Stroke Symposium. Co-Moderator and Speaker (Orlando, FL)

4/08: Great Lakes Neuro-Ophthalmology Conference. Visiting Professor (case sessions) and Guest Lecturer (see above) (Michigan State University, Lansing, MI)

4/09: American Academy of Neurology 2009 Neuro-ophthalmology and Neurovestibular Examination Laboratory (AAN 3BS.002). Course faculty for clinical skills transfer workshop focused on training techniques for bedside assessment of patients with dizziness (Seattle, WA).

4/10: American Academy of Neurology 2010 Neurology Skills Pavilion: Neuro-ophthalmology and Neurovestibular Exam Lab (AAN 7NP.001). Course faculty for clinical skills transfer workshop focused on training techniques for bedside assessment of patients with dizziness (Toronto, ON).

4/10: American Academy of Neurology 2010 Neuro-otology (AAN 8AC.007). Course director, speaker, and panel moderator for CME course at AAN Annual Meeting (Toronto, ON).

Mentoring:

General Mentoring Activities

- Annual Neurology New Faculty Orientation Committee Member (4/02-7/03)
- Career Advisor to students interested in careers in Neurology (9/02-present)
- Annual Medical Student Residency Fair Discussant for Neurology (1/03, 1/04, 3/05)
- Speaker & Panelist, Neurology New Faculty Orientation (8/03)
- Annual Neurology 'Liver Rounds' Participant for Neurology (3/04, 2/05, 3/07, 3/09)
- Web Designer, Student Interest Group in Neurology [SIGN] (12/04)

- SIGN Presenter – Preparing for a Possible Career in Neurology (1/05)
- SIGN Discussant – Neurology Research Opportunities (2/07)
- SIGN Discussant – Neurology Residency Application Process (11/07)
- Faculty, Re-Visit Luncheon for School of Medicine Applicants (4/08)
- SIGN Presenter – On Being a Neurologist (9/09)

Advisees (dates, name, degree, present position, awards/grants/degrees received under your direction)

Post-doctoral Research Fellows

- 7/06-6/08 (career advisor, research preceptor): Gregory Butchy, D.O.; advisor and research preceptor during Master of Medical Informatics (MMI) fellowship; MMI Thesis on cost-effectiveness study for diagnostic evaluation of dizzy patients in the ED under my direct supervision, JHU SOM Division of Health Sciences Informatics; MMI recipient 6/08; 7/08-pres. pathology resident, Univ. of Medicine and Dentistry, New Jersey
Butchy GT. Decision and cost-effectiveness analyses to determine the performance requirements for a potential diagnostic decision support system. A thesis submitted to Johns Hopkins University in conformity with the requirements for the degree of Master of Science in Health Sciences Informatics. Baltimore, Maryland. March, 2008.
 Newman-Toker DE, Hsieh YH, Camargo CA Jr., Pelletier AJ, **Butchy GT**, Edlow JA. Spectrum of dizziness visits to US emergency departments: cross-sectional analysis from a nationally-representative sample. Mayo Clinic Proceedings 2008 Jul;83(7):765-775.
- 6/08-2/09 (research preceptor): Priti Sharma, MBBS; worked on several research projects related to diagnostic evaluation of dizziness in the ED
 Newman-Toker DE*, **Sharma P**, Chowdhury M, Clemons TM, Zee DS, Della Santina CC. Penlight-cover test: a new bedside method to unmask nystagmus. Journal of Neurology, Neurosurgery, and Psychiatry 2009 Aug;80:900-903.
- 11/08-present (primary research mentor): Timothy Niessen, M.D.; primary research mentor (MPH program, Johns Hopkins Bloomberg School of Public Health through the Johns Hopkins Clinical Research Training, Education and Career Development Program)
 Chief Complaint Screening (Selected as one of four plenary session platform presentations at the National Predoctoral Clinical Research Training Program Meeting at Washington University in St. Louis, 2009)

Medical Student & Undergraduate Research Preceptorships

- 4/05-6/06: Lisa Guardabascio (now Lisa Cannon), M.D., JHU SOM 2006; *research elective preceptorship; four poster presentations and one second-authored full-length manuscript*
Guardabascio LM, Rothman RE, Zee DS, Newman-Toker DE. Chief complaint screening – a new method for symptom-oriented research in the Emergency Department. Poster presentation at the Society for Academic Emergency Medicine, May, 2006. Acad Emerg Med 2006 13(5 Supplement 1): S146.
 Newman-Toker DE, **Guardabascio LM**, Zee DS, Rothman RE. Taking the history from a dizzy patient – why “What do you mean by dizzy?” should not be the first question you ask. Poster presentation at the Society for Academic Emergency Medicine, May, 2006. Acad Emerg Med 2006 13(5 Supplement 1): S79.
 Newman-Toker DE, **Guardabascio LM**, Stofferahn ME, Rothman RE, Hsieh YH, Zee DS. Rethinking the approach to the dizzy patient: why “What do you mean by dizzy?” should not be the first question you ask. Poster presentation at the North American Neuro-Ophthalmology Society Meeting, February, 2007.
 Newman-Toker DE, **Guardabascio LM**, Stofferahn ME, Rothman RE, Hsieh YH, Zee DS. Rethinking the approach to the dizzy patient: why “What do you mean by dizzy?” should not be the first question you ask. Poster presentation at the American Academy of Neurology, May, 2007.
 Newman-Toker DE, **Cannon LM**, Stofferahn ME, Rothman RE, Hsieh YH, Zee DS. Imprecision in patient reports of dizziness symptom quality: a cross-sectional study conducted in an acute-care setting. Mayo Clinic Proceedings 2007 Nov; 82(11):1329-1340.
- 6/05-6/07: Matthew Stofferahn, M.D., JHU SOM 2007; *summer and ongoing research preceptorship; two poster presentations and one third-authored full-length manuscript*
 Newman-Toker DE, Guardabascio LM, **Stofferahn ME**, Rothman RE, Hsieh YH, Zee DS. Rethinking the approach to the dizzy patient: why “What do you mean by dizzy?” should not be the first question you ask. Poster presentation at the North American Neuro-Ophthalmology Society Meeting, February, 2007.

Newman-Toker DE, Guardabascio LM, **Stofferahn ME**, Rothman RE, Hsieh YH, Zee DS. Rethinking the approach to the dizzy patient: why “What do you mean by dizzy?” should not be the first question you ask. Poster presentation at the American Academy of Neurology, May, 2007.

Newman-Toker DE, Cannon LM, **Stofferahn ME**, Rothman RE, Hsieh YH, Zee DS. Imprecision in patient reports of dizziness symptom quality: a cross-sectional study conducted in an acute-care setting. *Mayo Clinic Proceedings* 2007 Nov; 82(11):1329-1340.

- 6/06-10/07: Victoria Stanton, M.D. candidate, UCSF SOM; *visiting student, summer research preceptorship followed by ongoing data analysis; four abstracts, one brief report (research letter), and two full-length manuscripts (one first-authored, one third-authored)*

Newman-Toker DE, **Stanton VA**, Hsieh YH, Camargo CA Jr., Edlow JA, Lovett P, Goldstein JN, Abbuhl S, Lin M, Chanmugam A, Rothman RE. Diagnosing dizziness in the emergency department — physicians may rely too heavily on symptom quality. Results of a multicenter, quantitative survey. American College of Emergency Physicians Research Forum. October 8-11, 2007, Seattle, Washington, USA. Abstracts. *Annals of Emergency Medicine* 2007 October. [*peer-reviewed publication in Mayo Clinic Proceedings 2007*]

Newman-Toker DE, Dy FJ, **Stanton VA**, Zee DS, Calkins H, Robinson KA. Primary cardiovascular disease causes true vertigo—a systematic review. Abstracts of the Bárány Society XXV International Congress. Kyoto, Japan, March 31-April 3, 2008. *Journal of Vestibular Research* 2008. [*peer-reviewed publication in Journal of General Internal Medicine 2008*]

Newman-Toker DE, Dy FJ, **Stanton VA**, Zee DS, Calkins H, Robinson KA. Primary cardiovascular disease causes true vertigo: a systematic review of observational studies. Platform presentation at the 60th Annual Meeting of the American Academy of Neurology. Chicago, USA, April 12-19, 2008. [*peer-reviewed publication in Journal of General Internal Medicine 2008*]

Newman-Toker DE, Dy FJ, **Stanton VA**, Zee DS, Calkins H, Robinson KA. Primary cardiovascular disease causes true vertigo: a systematic review of observational studies. SAEM 2008. [*poster accepted but not presented; abstract published*] [*peer-reviewed publication in Journal of General Internal Medicine 2008*]

Newman-Toker DE, **Stanton VA**, Hsieh YH, Rothman R. Frontline providers harbor misconceptions about the bedside evaluation of dizzy patients [research letter]. *Acta Oto-laryngologica* 2008 May;128(5):601-604.

Stanton VA, Hsieh YH, Camargo CA Jr., Edlow JA, Lovett P, Goldstein JN, Abbuhl S, Lin M, Chanmugam A, Rothman RE, Newman-Toker DE. Overreliance on symptom quality in diagnosing dizziness: results of a multicenter survey of emergency physicians. *Mayo Clinic Proceedings* 2007 Nov; 82(11):1319-1328.

Newman-Toker DE, Dy FJ, **Stanton VA**, Zee DS, Calkins H, Robinson KA. Primary cardiovascular disease causes true vertigo—a systematic review. *Journal of General Internal Medicine* 2008 Dec;23(12):2087-2094.
- 9/06-3/07: Sarah Tighe, M.D., JHU SOM 2007; *research preceptorship*
- 5/07-9/07: Fei Jamie Dy, *research preceptorship; three abstracts, one full-length manuscript*

Newman-Toker DE, **Dy FJ**, Stanton VA, Zee DS, Calkins H, Robinson KA. Primary cardiovascular disease causes true vertigo—a systematic review. Abstracts of the Bárány Society XXV International Congress. Kyoto, Japan, March 31-April 3, 2008. *Journal of Vestibular Research* 2008. [*peer-reviewed publication in Journal of General Internal Medicine 2008*]

Newman-Toker DE, **Dy FJ**, Stanton VA, Zee DS, Calkins H, Robinson KA. Primary cardiovascular disease causes true vertigo: a systematic review of observational studies. Platform presentation at the 60th Annual Meeting of the American Academy of Neurology. Chicago, USA, April 12-19, 2008. [*peer-reviewed publication in Journal of General Internal Medicine 2008*]

Newman-Toker DE, **Dy FJ**, Stanton VA, Zee DS, Calkins H, Robinson KA. Primary cardiovascular disease causes true vertigo: a systematic review of observational studies. SAEM 2008. [*poster accepted but not presented; abstract published*] [*peer-reviewed publication in Journal of General Internal Medicine 2008*]

Newman-Toker DE, **Dy FJ**, Stanton VA, Zee DS, Calkins H, Robinson KA. Primary cardiovascular disease causes true vertigo—a systematic review. *Journal of General Internal Medicine* 2008 Dec;23(12):2087-2094.
- 6/08-present: Kathleen Lee, *research preceptorship*; worked on followup visit study related to diagnostic evaluation of dizziness in the ED
- 8/08-2/09: Minhaj Chowdhury, *research preceptorship*; worked on penlight-cover test project related to diagnostic evaluation of dizziness in the ED

Newman-Toker DE*, Sharma P, **Chowdhury M**, Clemons TM, Zee DS, Della Santina CC. Penlight-cover test: a new bedside method to unmask nystagmus. *Journal of Neurology, Neurosurgery, and Psychiatry* 2009 Aug;80:900-903.

Other Publication Mentorship (Students, Residents, Fellows)

- 2004-6: Raymond Cheong, JHU SOM Student
Cheong R, Wilson RK, Cortese ICM, Newman-Toker DE. Mothball Withdrawal Encephalopathy – Case Report and Review of Paradichlorobenzene Neurotoxicity. Substance Abuse, 2007 Mar; 27(4):63-67.
- 2004-5: Robin Wilson, Johns Hopkins Adult Neurology Resident
Wilson R, Pardo-Villamizar C, Newman-Toker DE. When a fine diagnosis isn't good enough. Platform case presentation at the Walsh Society Meeting, February, 2005. (*presented by DNT*)
- 2005-6: James Castle, Johns Hopkins Adult Neurology Resident
Castle J, Sakonju A, Dalmau J, Newman-Toker DE. Anti-Ma2-associated encephalitis with normal FDG-PET: a case of pseudo-Whipple's disease. Nature Clinical Practice Neurology 2006 Oct; 2(10):566-572.
- 2006-7: Ai Sakonju, Johns Hopkins Pediatric Neurology Resident
Sakonju A, Newman-Toker DE. You shake my nerves and you rattle my brain. Platform case presentation at the Walsh Society Meeting, February, 2007. (*presented by AS*)
- 2007-8: Michael Levy, Johns Hopkins Adult Neurology Resident
Levy M, Newman-Toker DE*. Reversible chest tube Horner syndrome. Journal of Neuro-ophthalmology 2008 Sep; 28(3):212-3. [*case report with photo essay illustrating thoracic anatomy of Horner syndrome*]

Career Advising (Students, Residents, Fellows)

- 2/01-present (career advisor): Aaron Berkowitz, M.D. candidate, JHU SOM; advisor during medical school and ongoing for residency selection and applications process; currently Ph.D. candidate in Ethnomusicology, Harvard University
- 10/06-6/07 (career advisor): Ai Sakonju, M.D.; advisor during JHU SOM Pediatric Neurology Residency; currently Neuromuscular Fellow, University of Utah

Education Mentorship (Students, Residents, Fellows)

- 2006-8: Katherine Peters, Johns Hopkins Adult Neurology Resident and Fellow (mentoring in education careers and small-group teaching during the Neurology Clerkship)
- 2007-8: Joshua Ewen, Johns Hopkins Pediatric Neurology Resident and Fellow (mentoring in small-group teaching during 2nd year Neuropathology/pathophysiology Block)

Thesis committees (dates, name, title, your role)

- 5/09: Deanna Cettomai. Masters of Health Sciences (MHS) thesis, Johns Hopkins Bloomberg School of Public Health. Associations between retinal nerve fiber layer abnormalities and neurologists' assessments of optic disc pallor and relative afferent pupillary defects. Thesis reader.

Training grant participation (dates, program, your role)

None.

Educational Program Building/Leadership:

Total Teaching & Educational Program Building (since joining JHUSOM faculty 7/02)

>1000 hours of face-time didactic classroom teaching and mentoring of medical students

>4000 hours of academic administration and curriculum development activities

Course, Section/Block, & Strand Directorships (dates, name of educational program or curriculum, role)

JHU SOM 1st-Year Genes to Society Course, Nervous System & Special Senses Section

Course Length: 7 weeks, 1 cycle per year

Role: Section Director

Dates in Role: planning 10/05-present, first offered 4/10

JHU SOM 2nd-Year Pathophysiology Course, Neuro Block

Course Length: 2 weeks, 1 cycle per year
Role: Block Director (with Justin McArthur 2003-5, sole director thereafter)
Dates in Role: 1/03-12/09 (course combined with first-year neuroscience thereafter)

JHU SOM 2nd-Year Transition to the Wards Course

Course Length: 4 weeks, 1 cycle per year
Role: Course Director
Dates in Role: planning 10/05-present, first offered 1/10

JHU SOM 3rd-Year Neurology Clinical Clerkship

Course Length: 4 weeks, 10 cycles per year
Role: Clerkship Director (with E. O'Hearn 9/02-10/06, then B. Murinson 10/06-10/07)
Dates in Role: 9/02-present

JHU SOM 4th-Year Neurology Sub-Internship

Course Length: 4 weeks, year round
Role: Sub-Internship Director (with E. O'Hearn 9/02-10/06, then B. Murinson 10/06-10/07)
Dates in Role: 9/02-present

JHU SOM 4th-Year Neurology Elective

Course Length: 2-4 weeks, year round
Role: Neurology Elective Director (with E. O'Hearn 9/02-10/06, then B. Murinson 10/06-10/07)
Dates in Role: 9/02-present

JHU SOM 1st-4th Clinical Reasoning Horizontal Strand

Course Length: n/a (oversight across multiple courses throughout 4-year curriculum)
Role: Strand Director
Dates in Role: planning 3/07-present; first implementation planned AY 2009-10

Other Educational Program-Building and Curricular Activities

- 6/02: JHU Department of Medicine, ACGME Medical Residency Curriculum Workshop Participant
- 7/02-8/02: Accelera Corporation/Astra Zeneca Corporation. Medical education video for migraine; content developer and actor
- 3/08-pres.: Developer of the Diagnostic Safety Curriculum (a component of the larger Patient Safety Curriculum) for the Neurology Basic Clerkship

Educational Extramural Funding:

Grants/Contracts/Other (Current)

Dates:	1/1/09-12/31/09
Title:	The Complaint-Focused Neurologic History & Physical: "20 Questions" Diagnostic Gaming to Build Diagnostic Reasoning Skills – Software Platform Development & Pilot Testing in Clerkship Students
Identification Number:	AAN Education Research Grant
Sponsor:	American Academy of Neurology (AAN)
Total Direct Cost:	\$10,000
Principal Investigator:	David E. Newman-Toker, M.D., Ph.D.
Role:	Principal investigator
Description:	Misdiagnosis of neurological conditions is common in frontline healthcare settings. Prevention of morbidity from neurologic misdiagnosis requires diagnostic education of non-neurologists. Passive forms of teaching (e.g., traditional lecture) have not been shown to change physician behavior. Computer-based diagnostic case simulation capitalizes on active engagement, repetition, and competition to solidify learning. Fully-adaptive, screen-based simulators are prohibitively expensive. We believe intermediate solutions should capitalize on extended multiple choice formats to offer educational interactivity at low programming cost. Creation of an intermediate user (case developer)

interface would enable rapid deployment of new cases. We propose to build such a shell and populate it with cases related to a single "model" symptom (dizziness), then pilot test the system's usability and efficacy among medical students during a neurology clerkship. The software platform will enable diagnostic case-scenario gaming using a "20-questions" paradigm (e.g., "each element of history or exam you select costs time; you have 20 minutes to make the correct diagnosis").

Grants/Contracts/Other (Pending)

None

Grants/Contracts/Other (Previous)

Dates: 8/13/07-10/12/07
Title: **Neuroscience Teaching Fellowship (University of Rochester)**
Sponsor: American Neurological Association (ANA)
Identification Number: ANA Teaching Fellowship
Total Direct Cost: \$5,000
Principal Investigator: Ralph Józefowicz, M.D.
Role: Teaching Fellow

CLINICAL ACTIVITIES

Certification:

Medical, other state/government licensure (date, identification #)

Massachusetts State Medical License (5/12/99-10/14/01)
Massachusetts MCSR (5/24/99-7/1/00)
Maryland State Medical License (2/20/01-present)
Maryland CDS (2/22/01-present)
Federal DEA License (6/3/99-present)
National Provider Identification (NPI) (5/19/06-present)

Boards, other specialty certification (date, identification #)

American Board of Psychiatry and Neurology Diplomate (April, 2000, expires 12/31/2010)

Clinical (Service) Responsibilities (dates, specialty, role, time commitment):

Outpatient Clinical

- 3/01-2/05, neuro-otology & neuro-ophthalmology, outpatient clinic attending, 0.5 days per week

Inpatient Clinical

- 8/02-present, neurology, inpatient attending (general neurology or consult service), 2-6 weeks per year (average service time 4 weeks per year since 8/02)

Clinical Program Building/Leadership (dates, name of clinical program, role):

Optical coherence tomography service (primary reader, planned start 2010).

Clinical Extramural Funding (current, pending, previous):

None.

ORGANIZATIONAL ACTIVITIES

Institutional Administrative Appointments (CURRENT: dates, committees):

Educational Policy and Curriculum Committee (EPCC) & Related Committees (JHU SOM)

1. 9/02-pres: EPCC Member
2. 9/02-pres: EPCC Clerkship Directors' Subcommittee Member
3. 9/02-9/04, 10/07-pres: Student Promotions Committee Member
4. 10/05-pres: Simulation Center Advisory Board Member
5. 12/06-pres: Genes to Society Integration Committee Member

Other Institutional Committees

6. 3/02-pres: 2nd Year Neuro Block Planning Committee Member/Leader (leader 1/03)
7. 9/02-pres: Neurology Department Education Committee Member
8. 2/04-pres: 2nd Year Pathophysiology Course Focus Group Member
9. 12/07-pres: GTS Course Block Leaders Committee Member
10. 1/08-pres: Transition to the Wards Curriculum Committee Chairman
 - a. 9/08-pres: TTW Systems to Symptoms-Transition Workgroup Leader
 - b. 9/08-pres: TTW Outcomes Workgroup Member
11. 3/08-pres: Horizontal Strand Leaders Committee Member
12. 6/08-pres: Nervous System & Special Senses Curriculum Committee Chairman
 - a. 6/08-pres: NSS Stakeholders Committee Member
 - b. 9/08-pres: NSS Special Sensory & Motor Workgroup Leader
 - c. 9/08-pres: NSS Anatomy Workgroup Member
 - d. 9/08-pres: NSS Multi-System Diseases Workgroup Member
 - e. 9/08-pres: NSS Neuroscience Labs Workgroup Member
 - f. 9/08-pres: NSS Clinical Skills Workgroup Member
13. 11/09-pres: Johns Hopkins Bloomberg School of Public Health Committee on Academic Standards (representative from the Graduate Training Program in Clinical Investigation)

Institutional Administrative Appointments (PREVIOUS: dates, committees):

Educational Policy and Curriculum Committee (EPCC) & Related Committees (JHU SOM)

1. 2/03: Simulation Center Development Committee Member
2. 8/05-7/06: Student Assessment and Program Evaluation (SAPE) Committee Member
3. 1/08-3/09: Grading Policy Committee Member

Curriculum Reform Committees (JHU SOM, CRC, 2003-2007)

4. 11/03-10/06: Clinical Sciences Subcommittee Member
5. 11/03-1/05: Technology in Education Subcommittee Member
6. 2/04-1/05: Basic Science Subcommittee Member
7. 3/04-1/05: Measurement Subcommittee Member
8. 1/05-11/05: Mind-Brain-Behavior Subcommittee Member/Leader
9. 9/05-1/06: CRC Steering Committee Member
10. 10/05-6/06: Transition to the Wards Planning Committee Chairman
11. 10/05-10/06: Educational Methods Subcommittee Member
12. 11/05-9/06: Genes to Society (GTS) Steering Committee Member
13. 6/07-8/07: Active Learning Strategies Committee Member

Other Institutional Committees

14. 4/02: Neurology Faculty Career Development Working Group Member

Editorial Activities (dates, role):

Editorial Board appointments

None.

Journal peer review activities

Ad Hoc Peer Reviewer, Annals of Neurology (Fall, 2001-present)
Ad Hoc Peer Reviewer, Journal of Neuro-Ophthalmology (Spring, 2007-present)
Ad Hoc Peer Reviewer, Neurology (Spring, 2008-present)
Ad Hoc Peer Reviewer, Stroke (Summer, 2008-present)
Ad Hoc Peer Reviewer, Journal of the Neurological Sciences (Spring, 2009-present)
Ad Hoc Peer Reviewer, JAMA (Spring, 2009-present)
Ad Hoc Peer Reviewer, The Neurologist (Summer, 2009-present)

Book peer review activities

Ad Hoc Peer Reviewer, Oxford University Press (Fall, 2009)

Advisory Committees, Review Groups/Study Sections (date, sponsor, role):

Advisory, Internal Review and Search Committees (JHU SOM)

1. 11/03: Neuropathology Residency Training Program Review Committee Member
2. 11/04-2/05: Clinical Skills Director Search Committee Member & Interviewer
3. 3/09-present: Leadership Development Advisory Council (LDAC)

Applicant Selection Committees

4. 11/01-present: Undergraduate Applicant Alumni Interviewer, Yale University (*interviews most years*)
5. 7/02-present: Oto-Neurology Fellowship Applicant Interviewer, Vestibular Division (*interviews some years*)
6. 12/02-present: Neurology Residency Applicant Interviewer, JHU Neurology (*interviews most years*)
7. 12/02-present: Annual Neurology Residency Applicant Selection Meeting Participant (*most years*)

Grant Peer Review Activities

8. 4/07: Grant Reviewer, Dept. Emergency Medicine, Career Development Award
9. 6/07-present: Grant Reviewer, American Academy of Neurology (AAN) Education Research Subcommittee

Scientific Abstract/Presentation Peer Review Activities

10. 11/09: Scientific Abstract Reviewer, Neuro-ophthalmology/Neuro-otology Topic Area, American Academy of Neurology (AAN) Annual Meeting, Toronto, ON.

Professional Societies (CURRENT: date, membership, committees, role):

- American Academy of Neurology [AAN] (1998-present, status Active Member)
 - Consortium of Neurology Clerkship Directors Member (10/03-present)
 - Task Force Leader – “Guidelines for Focused Neurologic Exams” (to develop specifications for teaching the focused neurologic examination to medical students) (4/08-present)
 - Education Research Subcommittee Member (3/07-present)
 - Undergraduate Education Subcommittee Member (6/07-present)
 - Subcommittee for Education of the Non-Neurologist (4/08 [guest member]; committee sunsetted)
 - Consortium of Neuroscience Course Directors (Leadership group) (4/08-present)
 - A.B. Baker Section Member (6/07-present) (*section focused on neurologic education*)
- North American Neuro-Ophthalmology Society [NANOS] (2002-present, status Active Member, NANOS Fellow since 3/08)
 - Web Education Committee Member (2/05-present); Vice Chairman (8/08-present)
 - NOVEL/NANOS Curriculum Committee Member (2/07-present)

- Society for Academic Emergency Medicine (2003-present, status Associate Member)
 - Neurologic Emergencies Interest Group (2006-present)
- International Bárány Society (2007-present, working group member; 6/09-present Co-Chair)
 - International Working Group for Vestibular Disorders Classification (10/07-present)
- American Neurological Association (4/09-present)

Professional Societies (PRIOR: date, membership, committees, role):

- Physicians for a National Health Program (1992-1995)
- American Federation for Medical Research [AFMR] (2001-2003)
 - Trainee Education Committee Member (10/02-10/03)

Conference Organizer, Session Chair (date, sponsor, role):

- 3/08 (Orlando, FL): North American Neuro-Ophthalmology Society (NANOS) “Stroke Symposium” — Session Co-Moderator and Speaker
- 4/09 (Seattle, WA): American Academy of Neurology (AAN) Session 4SS.020 “Neurologic Education” — Session Co-Chair
- 10/09 (Los Angeles, CA): Diagnostic Error in Medicine 2009 Conference (2nd Annual) — DEM Planning Committee Member (7/08-10/10); Session Chair “Reducing Diagnostic Error: Next Steps – Research & Education”; Invited Speaker [*details listed below under invited extramural talks other than Grand Rounds*]
- 4/10 (Toronto, ON): American Academy of Neurology (AAN) Session 8AC.007 “Neuro-Otology” — Course Director, Invited Speaker [*details listed above under CME instruction*]
- 10/10 (Toronto, ON): Diagnostic Error in Medicine 2010 Conference (3rd Annual) — DEM Meeting Chair (10/09-present)

Consultantships (date, organization/agency, role):

- 9/09: World Health Organization (WHO) Patient Safety. External consultant on first draft of “Patient Safety Research Curriculum Guide.”

RECOGNITION

Awards, Honors (date, title, description, sponsor):

Teaching Awards and Recognition

- **5/00 (Harvard University, Massachusetts Eye & Ear Infirmary): Runner Up, Fellow of the Year Teaching Award.** This prize is awarded annually by the MEEI Ophthalmology residents to the best teaching fellow across all Divisions of the Ophthalmology Department.
- **5/04 (JHMI, SOM): 2nd Runner Up, Teacher of the Year for the Basic Sciences, Class of 2006.** This prize is awarded annually by JHU medical students to the best teacher in the basic science year 2.
- **4/05 (JHMI, SOM): LCME School-Wide Self-Study Survey Report Citations:**
 - a. “**Pathophysiology** Generally well received with no group lower than 50% satisfaction and 5 of 7 above 65% satisfaction. In particular, Renal and **Neurology** received excellent reviews. The quality of teaching in these sections was consistently complemented [*sic*] as outstanding. Michael Choi and **David Newman-Toker** were named again and again.”
 - b. “**Neurology** followed with a satisfaction level of 74.2% (*behind Emergency Medicine 80.2% and Internal Medicine 75.0%, and ahead of Pediatrics 67.6%, Psychiatry 63.5%, Surgery 62.1%, Ambulatory Medicine 59.1%, Obstetrics & Gynecology 53.8%, and Ophthalmology 44.9%*). It is currently approximately a 4 week rotation with 3 weeks of inpatient service or consult service and a week of outpatient Neurology. Students enjoyed the variety of inpatient and outpatient care seen—a week of outpatient medicine is built into the course. Students felt “very welcome” by the attendings and residents. There was much “personal attention.” The course director, **David Newman-Toker**, was highlighted for his “great advances” and teaching ability.”

- **5/05 (JHMI, SOM):** 2nd Runner Up, Teacher of the Year for the Basic Sciences, Class of 2007. This prize is awarded annually by JHU medical students to the best teacher in the basic science year 2.
- **5/06 (JHMI, SOM):** Runner Up, Teacher of the Year for the Clinical Sciences, Class of 2006. This prize is awarded annually by JHU medical students to the best teacher in the clinical years.
- **3/07 (JHMI, SOM):** Nominee, Teacher of the Year for the Basic Sciences, Class of 2009. This prize is awarded annually by JHU medical students to the best teacher in the basic science year 2.
- **5/07 (JHMI, Wilmer Eye Institute): Neil R. Miller Faculty Teaching Award 2007.** This prize is awarded annually by JHU medical students to the best faculty teacher in the Ophthalmology Basic Clerkship.
- **5/07 (JHMI, SOM): Student Marshal, Class of 2007.** This honor is awarded annually by medical students to five educators who had a significant impact on their 4-year experience.
- **8/07-10/07 (Rochester University, Rochester, NY): American Neurological Association's Teaching Scholar Program, Fellowship Recipient.** The purpose of this program is to train neurologists to become master teachers and administrators for integrated neuroscience curricula in medical school. One such fellowship is offered at the University of Rochester per year. The American Neurological Association grant provides a \$5000 stipend to support the faculty development experience [*note, also listed under educational extramural funding*].
- **1/08 & 5/08 (Harvard University, Boston, MA): Harvard Macy Institute Educators in the Health Professions Program.** The mission of the Harvard Macy Institute is to create and foster a community of scholars who work to promote innovative change in medical education. The goal of the Educators in Health Professions Program is to enhance the professional development of physicians, basic scientists and other healthcare professionals as educators. The program combines five major themes: Learning and teaching, curriculum, evaluation, leadership, and information technology. The program provides a select group of 55 healthcare professionals with the knowledge base and skills to enhance their expertise in both conducting an educational project of their own design and taking a leadership role in the educational activities at their home institutions.
- **2/08 (American Academy of Neurology, A.B. Baker Section on Neurologic Education): Teacher Recognition Certificate.** This is an American Academy of Neurology recognition honoring outstanding teachers of Neurology, nominated from within their Departments.

Other Awards and Recognition

- **5/91 (Yale University): Graduation *Cum Laude*, Molecular Biophysics & Biochemistry**
- **5/95 (University of Pennsylvania School of Medicine): William T. Fitts, Jr. Memorial Prize.** This prize is awarded to a graduating student for excellence in the surgery of trauma.
- **7/03 (Airlie, VA): Office of Behavioral & Social Sciences Research Scholarship for the NIH Summer Training Institute on the Design and Conduct of Randomized Clinical Trials Involving Behavioral Interventions (National Institutes of Health, OBSSR)**

The objective of this program is to provide a thorough grounding in the conduct of randomized clinical trials to researchers and health professionals interested in developing competence in the planning, design, and execution of clinical trials involving behavioral interventions. Due to the limited number of spaces in the course, priority will be given to individuals who already have their Ph.D. or M.D. (or equivalent degrees) and have at least two years of subsequent research experience. Applicants should not yet have achieved a tenured position at their institution. Beyond these eligibility criteria we are seeking researchers who have demonstrated research potential and experience and who will clearly benefit from behavioral randomized controlled trial training.
- **5/07 (JHMI, BSPH): Delta Omega Honorary Society in Public Health, Alpha Chapter, Johns Hopkins Bloomberg School of Public Health**

The Chapter elects students, faculty, and alumni nominated by their peers for their scholarly achievements and contributions to the advancement of public health. Only students meeting the highest academic standards and endorsed by the faculty are eligible for membership, and only those demonstrating a potential for significant contribution to the field of public health are elected to the Society. Election to membership in Delta Omega recognizes not only merit but also encourages further excellence and devotion to public health.
- **3/08 (Washington, D.C.): American Academy of Neurology Leadership Development Program, Subcommittee Participant by Nomination and Special Invitation**

This program is designed to identify and support future leaders of the American Academy of Neurology (AAN). Participation in this program will increase the knowledge of the AAN and provide improved understanding of the roles, responsibilities, key principles and disciplines for effective leadership in our organization. Participants include Members of the Board of Directors, Committee and Subcommittee Chairs, and 15 select Committee or Subcommittee Members who are nominated and compete by application to participate in the program.

- **3/08 (Orlando, FL): North American Neuro-Ophthalmology Society [NANOS] Fellow**

“Fellow” status is awarded to active NANOS members in good standing who are board-certified specialists, trained in neuro-ophthalmology with a chief interest in clinical practice, teaching, or research in this domain. Individuals must have attended at least five annual meetings and are required to have demonstrated special achievement in clinical neuro-ophthalmology.

- **4/09 (Minneapolis, MN): American Neurological Association [ANA] Active Member**

“I am very pleased to inform you that you have been elected to the American Neurological Association as an Active member. Your election was based on your substantial academic contributions to neurology and neuroscience, and your promise for continued leadership in the field. After rigorous review by the Membership Advisory Committee, the Council of the Association approved the final selection. As you may know, the ANA is the world’s oldest neurological society and one of the earliest academic societies in the United States. In addition to serving as a collegial organization of academic neurologists, the ANA is proud to publish a first tier journal, the *Annals of Neurology*, host an annual meeting of the highest quality, and engage in a range of activities essential for academic neurology and the development of academic careers.”

Invited Talks and Panels (date, title, venue, sponsor):

Grand Rounds (16/19 extramural, 12/19 national)

1. 1/02: “Preventing Misdiagnosis of Dizzy Patients in the Emergency Department - Designing a Systematic Approach to Bedside Diagnosis” (University of Florida Health Science Center, Jacksonville, FL, Department of Emergency Medicine)
2. 1/02: “Building a New Model for Diagnosis of ED Dizzy Patients” (Massachusetts General Hospital, Boston, MA, Department of Neurology, Harvard University School of Medicine) (*note, this was an abbreviated Grand Rounds presentation where selected former residents were allowed to present research discoveries*)
3. 3/04: “A New Approach to Evaluation of the Dizzy Patient” (Saint Agnes Hospital, Baltimore, MD, Department of Emergency Medicine)
4. 5/05: “21st Century Neuro-Otology: Towards Automated Triage of the E.D. Dizzy Patient” (Hospital University of Pennsylvania, Philadelphia, PA, Department of Neurology, University of Pennsylvania School of Medicine)
5. 12/05: “Triage and Initial Management of the Acutely Dizzy Patient” (NewYork-Presbyterian Hospital, New York, NY, Department of Emergency Medicine, Cornell University School of Medicine)
6. 11/05: “Skew Deviation & the OTR. *Extra ‘steps’ and the old ‘new’ language of vertical & cyclovertical strabismus*” (Moran Eye Center, Salt Lake City, UT, Department of Ophthalmology, University of Utah School of Medicine)
7. 5/06: “Emergency Evaluation of the Acutely Dizzy Patient” (York Hospital, York, PA, Department of Internal Medicine)
8. 7/06: “Emergency Evaluation of the Acutely Dizzy Patient” (University Hospital, Salt Lake City, UT, Department of Neurology, University of Utah School of Medicine)
9. 11/06: “Diagnosing the Dizzy Patient: why ‘What do you mean by dizzy?’ should NOT be the first question you ask” (Johns Hopkins Hospital, Department of Neurology, Johns Hopkins University School of Medicine)
10. 1/07: “Diagnosing the Dizzy Patient: why ‘What do you mean by dizzy?’ should NOT be the first question you ask” (Johns Hopkins Hospital, Department of Neurosurgery, Johns Hopkins University School of Medicine)
11. 5/07: “Diagnosing the Dizzy Patient: Why ‘What do you mean by ‘dizzy’?’ should NOT be the first question you ask” (Massachusetts General Hospital, Department of Neurology, Harvard University School of Medicine)
12. 9/07: “Diagnosing the Dizzy Patient: Why ‘What do you mean by ‘dizzy’?’ should NOT be the first question you ask” (Strong Memorial Hospital, Rochester, NY, Department of Neurology, University of Rochester School of Medicine)

13. 10/07: "Diagnosing the Dizzy Patient: Why "What do you mean by 'dizzy'?" should NOT be the first question you ask" (University of Maryland Medical Center, Baltimore, MD, Department of Neurology, University of Maryland School of Medicine)
14. 4/08: "Diagnosing the Acutely Dizzy Patient — A New Approach" (Michigan State University, East Lansing, MI, Department of Neurology, Michigan State College of Human Medicine)
15. 1/09: "Towards a New Approach to Diagnosing Dizziness in the Emergency Department: *Challenges of Translational, Symptom-Oriented Diagnostic Research in Frontline Healthcare Settings*" (Welch Center for Prevention, Epidemiology, & Clinical Research, Baltimore, MD, Johns Hopkins University School of Medicine)
16. 2/09: "Diagnosing the Acutely Dizzy Patient — A New Approach" (Greater Baltimore Medical Center, Baltimore, MD, Department of Medicine)
17. 7/09: "H.I.N.T.S. to I.N.F.A.R.C.T. — Finding the Cerebrovascular 'Needle' amidst the Acutely Dizzy 'Haystack'" (NewYork-Presbyterian Hospital, New York, NY, Department of Neurology and Neuroscience, Weill Cornell Medical Center)
18. 8/09: "Diagnosing the Acutely Dizzy Patient — A New Approach" (OSF Saint Francis Medical Center, Peoria, IL, Department of Neurology, University of Illinois College of Medicine, Peoria)
19. 11/09: "H.I.N.T.S. to I.N.F.A.R.C.T. — Finding the Cerebrovascular 'Needle' amidst the Acutely Dizzy 'Haystack'" (Yale University School of Medicine, New Haven, CT)

Invited Extramural Talks and Panels Other than Grand Rounds

1. 3/03: Panelist, Trainee Education Luncheon, "Keeping the Balance" (tips on balancing career and home life for the junior investigator), AFMR National Meeting
2. 5/06: Guest CME Speaker, Medical University of Ohio, Hot Topics 2006 – Emergency Neurology, "Emergency Evaluation of the Acutely Dizzy Patient" (*also listed under CME*)
3. 1/07: Guest CME Speaker, University of Maryland Health Center Annual CME Course 2007, "Triage and Initial Management of the Acutely Dizzy Patient" (*also listed under CME*)
4. 3/08: North American Neuro-Ophthalmology Society Annual Meeting, 2008, Stroke Symposium, "When is Acute Dizziness a Cerebrovascular Problem? *The Eyes Have It*" (*also listed under CME*)
5. 4/08: Guest Conference Speaker, Great Lakes Neuro-Ophthalmology Conference, Michigan State University, "Clinically-Relevant Neuroanatomy of Horizontal Gaze Pathways" and "Vertigo and the Pathophysiology of Bedside Vestibular Eye Signs" (*also listed above*)
6. 8/08: Invited Research Speaker, University of Rochester School of Medicine, "Towards a New Approach to Diagnosing Dizziness in the Emergency Department: *Challenges of Translational, Symptom-Oriented Research in Frontline Healthcare Settings*"
7. 9/08: Guest CME Speaker, Maryland Academy of Physician Assistants, Annual Meeting 2008, MAPA Trends in Patient Management 2008, "Workup of the Acute Dizzy Patient: *When is it a Cerebrovascular Problem?*" (*also listed under CME*)
8. 8/09: Guest Speaker, The People's Pharmacy with Joe and Terry Graedon (radio show airing on national NPR affiliates), Show #737 – Diagnostic Errors (<http://www.peoplespharmacy.com/2009/08/29/737-diagnostic-errors/>)
9. 10/09: Acute vestibular syndrome—oculomotor signs more sensitive for stroke than MRI. Invited platform presentation, Derek Denny-Brown New Member Symposium, 134th Annual Meeting of the American Neurological Association. Baltimore, USA, October 11-14, 2009.
10. 10/09: Understanding Diagnostic Error: Root Cause Analysis of a Case. Invited panelist (case discussant). Diagnostic Error in Medicine 2009. Los Angeles, CA, USA, October 21-22, 2009.
11. 10/09: Reducing Diagnostic Error: Interventional Studies Completed & In Progress. "Reducing Neurologic Misdiagnosis in Frontline Care Settings: Insights from ED Patients with Dizziness." Invited speaker. Diagnostic Error in Medicine 2009. Los Angeles, CA, USA, October 21-22, 2009.
12. 10/09: Reducing Diagnostic Error: Next Steps – Research & Education. "Constructing the Agenda for Diagnostic Errors Research and Education – A Proposed Framework." Invited speaker. Diagnostic Error in Medicine 2009. Los Angeles, CA, USA, October 21-22, 2009.
13. 10/09: Reducing Diagnostic Error: Next Steps – Research & Education. "Misdiagnosis of Common Symptoms: Overview of Prior Research and Opportunities for Further Study." Invited speaker & breakout group leader. Diagnostic Error in Medicine 2009. Los Angeles, CA, USA, October 21-22, 2009.

Invited Intramural Talks and Panels Other than Grand Rounds

1. 8/98: "Posterior Circulation Ischemia" (Massachusetts General Hospital, Department of Internal Medicine, Noon Conference)
2. 11/99: "Evaluation of Dizziness in the Urgent Care Setting I" (Massachusetts General Hospital, Chelsea Internal Medicine Group, Chelsea, MA, Special Lecture)
3. 4/00: "Evaluation of Dizziness in the Urgent Care Setting II" (Massachusetts General Hospital, Chelsea Internal Medicine Group, Chelsea, MA, Special Lecture)
4. 5/00: "Neuro-ophthalmic Diseases Masquerading as Benign Strabismus" (Massachusetts Eye & Ear Infirmary, Department of Ophthalmology, Annual Fellows' Course)
5. 7/00: "New Dizziness in the Urgent Care Setting – Stroke vs. No Stroke: A Cross-Sectional, Cohort Study" (JHU BSPH, Clinical Investigation Conference)
6. 1/01: "Dizzy Database: Preliminary Plans & Prototype" (JHU SOM, Departments of Neurology & Otolaryngology, Neuro-otology Conference)
7. 4/01: "Medical Errors: Preventing Misdiagnosis of Dizzy Patients in the Emergency Department" (JHU SOM, Departments of Neurology & Otolaryngology, Neuro-otology Conference)
8. 6/01: "Medical Errors: Preventing Misdiagnosis of Dizzy Patients in the Emergency Room - Designing A Systematic Approach to Bedside Diagnosis" (JHU SOM, Department of Biomedical Engineering, Center for Hearing & Balance Seminar)
9. 9/01: "Building A New Model for Diagnosis of Dizzy Patients in the Emergency Department" (JHU SOM, Department of Emergency Medicine, Emergency Department Research Seminar)
10. 2/02: "Improving Patient Safety & Diagnostic Errors in Dizziness—How Rules Have Failed Us" (JHU SOM, Division of Health Science Informatics, Informatics Seminar)
11. 11/02: "Health-Related Quality of Life in Patients with Dizziness" (JHUSOM, Departments of Neurology & Otolaryngology, Neuro-otology Conference)
12. 1/03: "Building A New Model for Diagnosis of Dizzy Patients in the Emergency Department" (JHU SOM, Department of Neurology, Neuroscience Research Seminar)
13. 1/03: "Building A New Model for Diagnosis of Dizzy Patients in the Emergency Department" (JHU BSPH, Clinical Investigation Research Seminar)
14. 1/04: "A New Algorithm for Diagnosis of Dizzy Patients in the Emergency Department" (JHU SOM, Departments of Neurology & Otolaryngology, Neuro-otology Conference)
15. 5/04: "The Spiral Curriculum, A New Approach to Medical Education" (JHU SOM, Curriculum Reform Committee Meeting)
16. 1/05: "Building a New Model for Diagnosis of Dizzy Patients in the Emergency Department" (JHU BSPH, Clinical Investigation Conference)
17. 5/05: "Identifying 'The Dizzy Patient' in the Emergency Department" (JHU BSPH, Department of Health Policy & Management, Qualitative Research Methods Group)
18. 9/05: "Why 'What do you Mean By Dizziness?' Shouldn't Be the First Question You Ask" (JHU SOM, Departments of Neurology & Otolaryngology, Neuro-otology Conference)
19. 9/05: "Why 'What do you Mean By Dizziness?' Shouldn't Be the First Question You Ask" (JHU SOM, Division of Health Science Informatics, Informatics Seminar)
20. 3/06: "Building a New Approach to the ED Dizzy Patient... and Beyond" (JHU SOM, Department of Emergency Medicine, Research Committee Meeting)
21. 5/06: "Why 'What do you Mean By Dizziness?' Shouldn't Be the First Question You Ask" (JHU SOM, Department of Emergency Medicine, Research Day)
22. 5/06: "Building a New Approach to the ED Dizzy Patient... and Beyond" (JHU BSPH, Dissertation Committee Meeting)
23. 8/06: "Why 'What do you Mean By Dizziness?' Shouldn't Be the First Question You Ask" (JHU SOM, Division of Health Science Informatics, Informatics Fellows' Conference)
24. 3/07: "Diagnosing Dizziness in the Emergency Department—*Why "What do you mean by 'dizzy'?" should NOT be the first question you ask*" (JHU BSPH, Dissertation Defense)
25. 7/07: "Why 'What do you Mean By Dizziness?' Shouldn't Be the First Question You Ask" (JHU SOM, Division of Health Science Informatics, Informatics Fellows' Conference)

26. 8/08: "Towards a New Approach to Diagnosing Dizziness in the Emergency Department – Challenges of Translational, Symptom-Oriented Research in Frontline Healthcare Settings" (JHU SOM, Division of Health Science Informatics, Informatics Fellows' Conference)
27. 10/08: "Automated Medical Interviewing for Diagnostic Decision Support in the Emergency Department" (JHU SOM, Quality & Patient Safety Research Group)
28. 6/09: "Transition to the Wards" (Bayview Curriculum Development Course Final Presentations, JHU SOM)
29. 9/09: "Towards a New Approach to Diagnosing Dizziness in the Emergency Department – Challenges of Translational, Symptom-Oriented Research in Frontline Healthcare Settings" (JHU SOM, Division of Health Science Informatics, Informatics Fellows' Conference)
30. 9/09: "On Being a Neurologist" (JHU SOM, Student Interest Group in Neurology – SIGN) (*also listed under mentoring*)

Press Articles and Media Appearances

1. 11/07: Foundation for the Education and Research in Neurological Emergencies (FERNE) posts summary of Newman-Toker's research on its website (http://www.ferne.org/Lectures/ferne_main.htm)
2. 11/08: MD Consult press summary of Newman-Toker's ANA meeting abstract on stroke misdiagnosis under the title "Dizziness Clouds Stroke Diagnosis in the Emergency Department" by journalist Betsy Bates
3. 3/09: JHU SOM sends out press release regarding JAMA commentary under the title "DIAGNOSTIC ERRORS: THE NEW FOCUS OF PATIENT SAFETY EXPERTS" by journalist Christen Brownlee (http://www.hopkinsmedicine.org/Press_releases/2009/03_10a_09.html) (<http://www.jhu.edu/~gazette/2009/16mar09/16diagnos.html>) (<http://nursing.advanceweb.com/Editorial/Content/Editorial.aspx?CC=195675>) (http://www.consumeraffairs.com/news04/2009/03/diagnosis_errors.html) (<http://www.diagnosticimaging.com/residents/article/113619/1388662?verify=0>)
4. 3/09: Isabel Healthcare posts link to JAMA commentary on Diagnostic Errors at their website (<http://www.isabel.org.uk/home/default>)
5. 3/09: Radio Interview, The People's Pharmacy with Joe and Terry Graedon (radio show airing on national NPR affiliates), "Diagnostic Errors" in show #718 – Health News Update (http://www.peoplespharmacy.com/archives/radio_shows/718_health_news_update.php)
6. 8/09: Print/Web Interview, Bottom Line Daily Health News. Deaths By "Wrong Diagnosis" Exceed 40,000/Year—Misdiagnosis: Serious Mistakes More Common than Drug Errors by journalist Eleanor Gilman (http://www.bottomlinesecrets.com/article.html?article_id=49544).
7. 8/09: Radio Guest Speaker, The People's Pharmacy with Joe and Terry Graedon (radio show airing on national NPR affiliates), Show #737 – Diagnostic Errors (<http://www.peoplespharmacy.com/2009/08/29/737-diagnostic-errors/>) (*also listed under Invited Talks above*)
8. 9/09: Print/Web Interview, Consumer Reports on Health (20th Anniversary Issue Feature Story). Don't be a diagnostic error! 10 common medical mix-ups and how to avoid them by journalist Patti Condon and editor Joel Keehn. Only named expert in the article was Newman-Toker.
9. 9/09: JHU SOM sends out press release regarding Stroke original research article about diagnosis of patients with acute dizziness under the title "CHEAP, QUICK BEDSIDE "EYE MOVEMENT" EXAM OUTPERFORMS MRI FOR DIAGNOSING STROKE IN PATIENTS WITH DIZZINESS" by journalist Christen Brownlee (http://www.hopkinsmedicine.org/Press_releases/2009/09_18_09.html) (<http://www.medicalnewstoday.com/articles/164584.php>) (<http://gazette.jhu.edu/2009/10/19/bedside-eye-exam-outperforms-mri-for-diagnosing-stroke/>) (<http://noticias.terra.com.br/ciencia/noticias/0,,OI4039290-EI8147,00-Exame+de+vista+pode+detectar+AVC+diz+estudo.html>)
10. 9/09: Print/Web Interview, DOTMed.com. Eye Movement Exam More Accurate Than MRI in Stroke Prediction by journalist Brendon Nafziger (<http://www.dotmed.com/news/story/10309/>)
11. 10/09: Print/Web Interview, SpectroscopyNow. Eye test betters MRI in stroke by journalist David Bradley (<http://www.spectroscopynow.com/coi/cda/detail.cda?id=22274&type=Feature&chId=3&page=1>)
12. 10/09: Television Interview, ABC 7 News, WJLA Baltimore. Eye Exam Used to Find Strokes by journalist Rebecca McDevitt (<http://www.wjla.com/news/stories/1009/668136.html>)
13. 10/09: Print/Web publicity, Medscape Medical News. What's hot at ANA 2009? By journalist Allison Gandey "Highlights will include a talk by **David Newman-Toker, MD**, on acute vestibular syndrome. Dr. Newman-Toker is from Johns Hopkins University School of Medicine in Baltimore; he will describe how oculomotor

signs are more sensitive for stroke than magnetic resonance imaging.”

(http://www.medscape.com/viewarticle/710296_print)

14. 10/09: Print/Web Interview, MedPage Today. ANA: Simple Signs Outperform MRI in Predicting Stroke by journalist Richard Robinson (<http://www.medpagetoday.com/Neurology/Strokes/16427>)
15. 10/09: Print/Web Interview, Medscape Medical News. Bedside Eye Exam Outperforms MRI in Identifying Stroke by journalist Allison Gandey (<http://www.medscape.com/viewarticle/710698?src=mpnews&spon=18&uac=44471HG>)
16. 10/09: Radio Interview, The People’s Pharmacy with Joe and Terry Graedon (radio show airing on national NPR affiliates), “Dizziness Diagnosis” in show #745 – Health News Update (<http://www.peoplespharmacy.com/2009/10/24/745-health-news-update/>)
17. 12/09: Print Interview: US News and World Reports. Getting a Good Diagnosis by journalist Deborah Kotz (published in the print edition of US News and World Reports, December, 2009).