

Welding's Toxic Legacy

Scientific articles are meant to be objective, but U.S. District Judge Kathleen O'Malley had doubts about the work presented in her court during litigation against manufacturers of welding products. In February 2008, she ordered all parties to produce records of any payments made to the authors of scientific articles cited by expert witnesses. Judge O'Malley wrote in her order that these authors could have "prejudices or biases. The most obvious of these possible biases is the receipt of money from one of the parties."

The welding industry produced a list of over \$10 million in payments to the authors of the scientific articles—dwarfing the \$500,000 that the plaintiffs had spent. Here is the full list of the industry's payments, itemized by date and recipient.

- The Center for Public Integrity, June 2008

#	Payee	Invoice date(s)	Payment amounts and total	Article(s) / listing related to payee	Expert(s) On Whose List Article Appears	Notes
1	ChemRisk	12/7/2005 12/31/2006 1/31/2006 2/28/2006 2/28/2006 2/28/2006 2/28/2006 3/31/2006 4/30/2006 5/31/2006 6/30/2006 6/30/2006 6/30/2006 6/30/2006 7/31/2006 8/31/2006 8/31/2006 8/31/2006 8/31/2006 9/30/2006 9/30/2006 10/31/2006 10/31/2006 10/31/2006 11/30/2006 11/30/2006 11/30/2006 11/30/2006	\$13,222.32 \$21,287.25 \$6,414.25 \$13,518.25 \$5,096.50 \$3,080.50 \$106.44 \$3,797.75 \$8,302.25 \$2,260.19 \$12,102.25 \$9,224.25 \$40.87 \$17,559.87 \$16,172.57 \$3,580.23 \$34,364.43 \$2,114.04 \$18,753.30 \$11,714.78 \$4,597.29 \$1,477.54 \$3,066.75 \$11,056.25 \$4,691.04 \$997.16 \$278.40 \$326.00 \$16,185.87 \$4,437.75 \$12,794.25	-State of the Science Review: Does Manganese Exposure During Welding Pose a Neurological Risk? (Finley) (2007)	-Furbee	ChemRisk is affiliated with Dr. Finley, a disclosed expert. The majority of the invoices reflect work done by Dr. Finley.
2	D&L Welding Fume Analysis	3/22/2004 5/31/2004 7/6/2004	\$50,000.00 \$14,550.00 \$17,530.00	-Analysis of Welding Fume from E6010 and B308-16 Electrodes	-Furbee -Furbee	D&L Welding Fume Analysis is

		8/8/2004 10/2/2004 12/5/2004 2/9/2005 3/6/2005 5/22/2005 6/28/2005 8/15/2005 11/1/2005 3/10/2006	\$36,450.00 \$17,969.00 \$39,324.51 \$30,000.00 \$15,000.00 \$35,000.00 \$35,000.00 \$70,000.00 \$35,000.00 \$430,823.51	-Analysis of Welding Fume from E7018 Electrodes (2004) -Analysis of Welding Fume from Lincore M Electrodes (2005)	-Furbee	affiliated with Dickinson and Lippold, who are disclosed experts. Payments reflect payments for work done by Dickinson and Lippold.
3	Dickinson, D. W.	5/11/2005	\$2,062.50	-Analysis of Welding Fume from E6010 and B308-16 Electrodes (2005) -Analysis of Welding Fume from E7018 Electrodes (2004) -Analysis of Welding Fume from Lincore M Electrodes (2005)	-Furbee -Furbee	Disclosed expert.
4	Eidelberg, David, M.D.	8/13/1997 4/27/1998 9/28/1999 2/28/2000 3/24/2000 4/25/2000 8/21/2001 2/13/2003 4/14/2003 4/16/2004 6/1/04 (?) 11/1/2004 11/8/2004 11/8/2004 2/2/2005 3/2/2005 4/1/2005 4/6/2005 6/30/2005 7/31/2005 10/10/2005 6/12/2006 11/21/2006 11/28/2006 11/30/2007	\$6,971.00 \$400.00 \$1,000.00 \$1,200.00 \$3,200.00 \$4,843.70 \$1,000.00 \$500.00 \$45,000.00 \$45,000.00 \$2,250.00 \$2,500.00 \$4,000.00 \$4,000.00 \$4,000.00 \$4,000.00 \$1,375.50 \$3,900.00 \$1,375.50 \$3,900.00 \$3,364.50 \$8,875.00	-Blinded positron emission tomography study of dopamine cell implantation for Parkinson's disease (2001) -Differential diagnosis of Parkinsonism with [18F] fluorodeoxyglucose and PET (1998) -Functional brain imaging in Parkinson's disease (2003) -Functional brain imaging of movement disorders (2000) -Functional brain networks in movement disorders (2000) -Quantitative brain PET: comparison of 2D and 3D acquisitions on the GE advance scanner (1998) -SPECT imaging in Parkinson's disease (2001)	-Eidelberg -Eidelberg -Eidelberg -Eidelberg -Eidelberg -Eidelberg -Eidelberg -Schapira, Hurtig, Eidelberg - Eidelberg - Schapira, Hurtig, Hurtig, Hurtig, Hurtig, Hurtig, Hurtig, Hurtig	Disclosed expert.

5	Environmental	1/9/2004	\$1,651.79	-The metabolic landscape of Parkinson's disease (1999) -The role of functional neuroimaging in the differential diagnosis of idiopathic Parkinson's disease and multiple system atrophy (2004) -The role of radiotracer imaging in Parkinson's disease (2005) -Retention and	-Furbee	1/9/2004
	Protection Agency	3/31/2005 12/10/2007	\$260.90 \$329.15 \$2,241.84	Intracellular Distribution of Instilled Iron Oxide Particles in Human Alveolar Macrophages (Bennet, Bromberg, Devlin, Kim, Lay – funded in part by EPA) (1998) -Neuropsychiatric effects of manganese on mood (Bowler – funded in part by EPA) (2003) -Translocation of Inhaled Ultrafine Manganese Oxide Particles to the Central Nervous System (Carter, Eider, Feikert, Finkelstein, Gelein, Ito, Maynard, Oberdorster, Opanashuk, Potter, Silva – funding from EPA) (2006) -Manganese Distribution Across the Blood-Brain Barrier III The Divalent Metal Transporter -1 is not the Major Mechanism Mediating Brain Manganese Uptake (Crossgrove – funding from EPA) (2004) -Inhalation health risks of manganese: an EPA perspective (Davis) (1999) -Correlation of brain magnetic resonance	-Sze, Hurtig -Furbee -Furbee, Sze -Furbee -Schapira -Sze -Sze -Sze -Sze -Sze -Sze -Sze -Sze -Sze -Sze	payment for copying charges in connection with document request. 3/31/2004 payment for clerical and professional time and copy and print charges. 12/10/2007 payment for copying charges and document search time.

			imaging changes with		
			pallidal manganese	F 1	
			concentrations in rhesus	-Furbee	
			monkeys following		
			subchronic manganese inhalation (Dye) (2006)	-Furbee	
			initialiation (Dye) (2000)	-ruibec	
-			-Behavioral and		
-			autonomic		
			thermoregulation in the	-Furbee,	
			rat following	Schapira,	
			propylthiouracilinduced	Hurtig	
			hypothyroidisin		
			(Gordon) (1997)	Factor	
			-Effects from	-Furbee	
i			environmental Mn		
-			exposures: a review of		
Į			the evidence from non-		
			occupational exposure		
			studies (Hudnell) (1999)		
			i i		
			-Manganese		
			neurotoxicity, a		
			continuum of		
			dysfunction: results from		
			a community based study (Hudnell) (1999)		
		ļ	study (Hudilen) (1999)		
		Į.	-Bioindicator and		
	-		exposure data for a		
			population based study		
			of manganese (Hudnell,		
	}		Baldwin, Belanger,		
			Bilodeau, Tardiff)		
			(1999)		
			-Manganese accentuates]	
			adverse mental health		
	1		effects associated with		
ŀ			alcohol use disorders		
ĺ			(Hudnell, Bowler,		
			Mergler, Sassine) (2002)		
			Naumamanaki-t-i-		
			-Neuropsychiatric effects of manganese on		
			mood (Hudnell, Larribe,		
			Mergler, Sassine) (2003)		
					i
			-Quantification of		
			neuromotor function for		
			detection of the effects		
			of manganese (Hudnell,		
			Beuter, DeGeoffroy,		
1			Edwards, Mergler) (1999)		
			(1377)		
			-Methods of calculating		
			lung delivery and		
			deposition of aerosol	 	
			particles (Kim) (2000)		}
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6	Environ International Corp.	9/26/2007 10/23/2007 11/28/2007 11/29/2007 12/19/2007 12/19/2007	\$575.00 \$4,094.66 \$4,862.19 \$5,829.87 \$24,394.19 \$25,473.59 \$51,649.82 \$116,879.32	-Manganese Distribution Across the Blood-Brain Barrier III The Divalent Metal Transporter -1 is not the Major Mechanism Mediating Brain Manganese Uptake (Yokel – partly funded by EPA) (2004) -A study of the relationships between Parkinson's disease and markers of traffic- derived and environmental manganese air pollution in two Canadian cities (Finkelstein, M, Jerrett – funded in part by EPA) (2007) -EPA Health Assessment Document for Manganese Final Report -Determination of an Occupational Exposure Guidelines for Manganese Using the Benchmark Method, Risk Analysis (Clewell, Crump, Lawrence) (2003) -State-of-the-Science Review: Does Manganese Exposure During Welding Pose a Neurological Risk? (Santamaria) (2007) -The effects of manganese in air (Clewell, Crump) (2004) (Environ Health Sciences Institute) -Pharmacokinetic Modeling of Manganese. III. Physiological Approaches Accounting for Background and Tracer Kinetics (Covington) (2007)	-Sze -Furbee -Furbee	Environ is affiliated with Fred Boelter, a disclosed expert. Invoices reflect payments made for work done by Mr. Boelter.
	- F	11/11/2004	\$542.32	Review: Does		affiliated with

		12/17/2004 1/11/2005 2/14/2005 3/10/2005 5/18/2005 6/14/2005 7/14/2005 8/11/2005 10/18/2005 11/21/2006 2/21/2006 3/7/2006 4/12/2006 5/18/2006 6/28/2006 7/26/2006 10/24/2006 11/22/2006 11/22/2006 11/22/2006 11/22/2006 12/6/2007 2/9/2007 4/12/2007 5/9/2007 6/16/2007 7/26/2007	\$10,938.45 \$5,440.72 \$8,735.00 \$1,100.00 \$5,246.84 \$2,662.50 \$4,260.00 \$2,485.00 \$1,065.00 \$2,840.00 \$3,550.00 \$3,905.00 \$3,905.00 \$3,905.00 \$3,000.00 \$3,1580.00 \$3,160.00	Manganese Exposure During Welding Pose a Neurological Risk? (Mowat, Cushing) (2007) -Fate of manganese associated with the inhalation of welding fumes: potential neurological effects (2005)	-Furbee	Mark Roberts who has spoken publicly on behalf of Defendants. The majority of the invoices reflect payments for Mr. Roberts' time.
8	Fechter, Laurence	8/23/2005	\$21,700.00	-Distribution of manganese in development (1999) -The relationship of particle size to olfactory nerve uptake of a nonsoluble form of manganese into brain (2002)	-Schapira -Furbee	Disclosed expert.
9	Garabrant, David H.	11/3/2001 11/23/2001 5/12/2002 8/24/2002 10/12/2002 12/31/2002 2/1/2003 5/4/2003 7/14/2003 9/28/2003 11/16/2003 7/3/2004 8/30/2004 8/31/2004 9/4/2004 9/4/2004 10/24/2004	\$2,024.00 \$3,954.60 \$7,689.00 \$2,728.00 \$396.00 \$5,610.00 \$6,130.64 \$13,854.24 \$2,508.00 \$10,940.00 \$8,067.95 \$3,520.00 \$7,860.36 \$1,496.00 \$2,601.00 \$1,628.00	-Reanalysis of the underlying data produced by Dr. Racette, under Court Order, in the Welding Fume Products Liability Litigation	-Makuch	Disclosed expert.

		10/24/2004 11/28/2004 2/5/2005 2/5/2005 2/6/2005 4/3/2005 5/11/2005 5/11/2005 5/11/2005 7/18/2005 7/18/2005 11/19/2005 1/3/2006 2/19/2006 5/6/2006 8/27/2006 11/21/2006 5/15/2007 11/11/2007	\$3,887.50 \$8,715.00 \$42,617.85 \$1,575.00 \$14,218.13 \$2,730.00 \$2,405.47 \$24,702.21 \$1,312.50 \$8,032.50 \$21,510.63 \$8,766.25 \$2,625.00 \$7,910.15 \$9,591.25 \$15,967.05 \$5,077.75 \$16,742.50 \$21,322.50 \$21,322.50 \$24,412.02 \$2,479.41 \$5,862.50 \$2,415.00			
10	Goldman, Samuel M.	6/18/2004 5/10/2007	\$1,750.00 \$14,000.00 \$15,750.00	-Occupation and Parkinson's disease onset age in a movement disorders clinic (2004) -Manganese exposure and risk of Parkinson's disease in twins (2004) -Occupation and Parkinson's disease (PD) onset age in three movement disorders clinics (2004) -Occupation and parkinsonism in three movement disorders clinics (2005) -Welding and risk of Parkinson's disease (2004) -Chronic manganese	-Furbee -Hurtig -Makuch -Hurtig, Schapira, Furbee, Perl (2) -Hurtig, Schapira, Furbee	Disclosed expert.
11	Harvard School of Public Health	7/3/1997	\$1,250.00	-Chronic manganese poisoning (Canavan, Cobb, Drinker) (1934) -Chronic manganese poisoning: report of a case with autopsy (Canavan, Cobb, Drinker) (1934)	-Furbee -Perl (2), Furbee, Perl, Hurtig, Schapira, Sze -Furbee	Payment in connection with Dr. Antonini's deposition in the Jones (Indiana) case.

	-Estimation of Personal Exposures to Particulate Matter and Metals in	-Furbee	
	Boiler Overhaul Work (Christiani, Hauser, Herrick, Liu, Smith, Williams, Woodin) (2005)	-Furbee	
	-Exposure to Fuel - Oil Ash and Welding	-Furbee	
	Emissions During the Overhaul of an Oil-Fired Boiler (Christiani,	-Schapira	
	Hauser, Herrick, Liu, Smith, Williams, Woodin) (2005)	-Perl, Perl (2)	
	-The Association of Expired Nitric Oxide with Occupational	-Schapira, Hurtig	
	Particulate Metal Exposure (Christiani, Hauser, Herrick, Kim, Wand) (2003)	-Makuch	
,	-Ventilation in Arc Welding with Coated Electrodes (Drinker, Tebbens) (1941)	-Makuch	
	-Welding fumes in steel fabrication (Drinker) (1944)		
	-The pathogenesis of neurodegenerative disease: neurotoxic mechanisms of actions and genetics (Feldman) (1999)		
	-The role of radiotracer imaging in Parkinson's disease (Lange) (2005)		
	-Number of Parkinson's disease deaths among male welders over time: National Center for Health Statistics mortality data files, 1985-1999 (Stampfer)		
	-Welding occupations and Parkinson's disease mortality: analysis of National Center for Health Statistics Mortality Data, 1985- 1999 (Stampfer) (2006)		

12	Hurtig, Howard, M.D.	4/2/2007 8/20/2007 10/23/2007	\$19,515.00 \$2,020.38 \$143.15 \$21,678.53	-Diagnostic accuracy of C9mTc]TRODAT-1 SPECT imaging in early Parkinson's disease (2004)	-Eidelberg	Disclosed expert.
				-Magnetic resonance imaging in Parkinson's disease and parkinsonian syndromes (1989) -Welding-related parkinsonism: clinical features, treatment, and pathophysiology (2001) -What is Parkinson's Disease? Neuropathology, Neurochemistry, and Pathophysiology. In Parkinson's Disease and Movement Disorders diagnosis and treatment guidelines for the practicing physician. Eds. Adler C.H. and Ahskog J.E. Humana Press, New Jersey. 200; 57-70 (2000)	-Sze -Schapira, Sze -Furbee	
				-Letter to the Editor regarding Racette's Welding-Related Parkinsonism article (2001)		
13	International Epidemiology Institute	9/29/2003 1/1/2004 4/2/2004 7/2/2004 5/18/2005 1/10/2005 10/18/2004 3/25/2005 11/30/2005 7/25/2006 9/11/2006 12/14/2006 1/8/2007 3/30/2007	\$57,940.00 \$57,940.00 \$57,940.00 \$106,940.00 \$57,940.00 \$9,600.00 \$99,133.00 \$99,133.00 \$99,133.00 \$29,850.00 \$36,958.00 \$36,958.00 \$36,878.00 \$35,310.00 \$913,195.00 (including Lipworth payments - see Notes)	-A cohort study of Parkinson's disease and other neurodegenerative disorders in Danish welders (Blot, Cohen, Fryzek, Lipworth) (2005) -Parkinson's disease and other basal ganglia or movement disorders in a large nationwide cohort of Swedish welders (Blot, Fryzek, McLaughlin) (2006)	-Makuch, Schapira, Hurtig, Perl (2), Furbee -Makuch, Hurtig, Furbee, Perl (2), Schapira	2003 to 2005 invoices reflect payments in connection with funding of Danish and Swedish studies. 2006 to 2007 invoices reflect payments in connection with efforts to respond to discovery requests about Danish and Swedish studies. In addition,

						Dr. Lipworth, a disclosed expert, billed \$90,475.00 from March 2002 to July 2006 for work consulting for Defendants.
14	Kaufmann, Horacio	8/31/2006 12/4/2006	\$48,713.74 \$132,000.00 \$180,713.74	-Brain magnetic resonance imaging in multiple-system atrophy and Parkinson disease: a diagnostic algorithm (2002) -Treatment of Patients with Orthostatic Hypotension and Syncope (2003)	-Sze -Furbee	Disclosed expert.
15	Kieburtz, Karl	5/28/2004 7/12/2004 9/15/2004 9/30/2004 10/15/2004 11/3/2004 12/11/2004 4/28/2005 6/22/2005 8/8/2005 9/1/2005 10/31/2005 12/3/2005 12/3/2005 3/13/2006 3/28/2006 6/5/2006 7/14/2006 10/27/2006 12/12/2007	\$1,000.00 \$8,500.00 \$13,835.00 \$20,300.00 \$20,835.00 \$17,975.00 \$5,500.00 \$38,415.00 \$13,000.00 \$1,477.00 \$14,000.00 \$10,000.00 \$17,260 \$12,000.00 \$772.60 \$12,000.00 \$7,500.00 \$15,294.30 \$6,500.00	-Welding and Parkinson disease: is there a bond? (2005) -Levodopa and the progression of Parkinson's disease (2004) -The role of radiotracer imaging in Parkinson's disease (2005)	-Makuch, Schapira, Furbee, Hurtig -Schapira, Hurtig -Schapira, Hurtig	Disclosed expert.
16	Lang, Anthony E.	8/23/2005 11/15/2005 2/13/2006 5/4/2006 6/20/2006 11/14/2006 12/14/2006 11/24/2007	\$19,616.00 \$23,659.91 \$17,393.50 \$26,812.50 \$35,056.27 \$4,037.50 \$1,275.00 \$84,547.06	-Challenges in Parkinson's disease: restoration of the nigrostriatal dopamine system is not enough (2004) -Time to move beyond nigrostriatal dopamine deficiency in Parkinson's disease (2004)	-Perl, Perl (2) -Perl, Perl (2) -Eidelberg -Schapira,	Disclosed expert.

			-Dopa-responsive parkinsonism with normal6[18F]-fluorodopa positron emission tomography scans (1990) -Levodopa and the progression of Parkinson's disease (2004) -Manganese-induced Parkinsonism associated with methcathinone (Ephedrone) abuse (2007) -SIC task force appraisal of clinical diagnostic criteria for Parkinsonian disorders (2003)	Hurtig, Eidelberg, Schapira, Sze -Hurtig, Schapira	
Langston, J. William	3/1/2001 6/20/2001 8/1/2001	\$3,000.00 \$5,000.00 \$4,570.18 \$12,570.18	-Manganese exposure and risk of Parkinson's disease in twins (2004) -Occupation and parkinsonism in three movement disorders clinics (2005) -Occupation and Parkinson's disease onset age in a movement disorders clinic. (2004) -The role of radiotracer imaging in Parkinson's disease (2005) -Welding and risk of Parkinson's disease (2004) -Occupation and Parkinson's disease (PD) onset age in three movement disorders clinics (2004) -Occupation and risk of Parkinson's disease (PD): a preliminary investigation. of Standard Occupational codes (SOC) in twins	-Hurtig, Schapira, Furbee, Perl (2) -Furbee -Schapira, Hurtig -Schapira, Hurtig, Furbee -Makuch -Furbee	Langston is affiliated with The Parkinson's Institute.

l				discordant for disease. (2003)		
18	Lash, Timothy L.	10/23/2005 2/25/2006 8/30/2006 10/23/2006 3/4/2007 5/4/2007 7/7/2007	\$6,475.00 \$2,800.00 \$15,050.00 \$4,550.00 \$4,500.00 \$5,400.00 \$3,262.50 \$42,037.50	-Risk factor studies of age-at-onset in a sample ascertained for Parkinson disease affected sibling pairs: a cautionary tale (2007)	-Makuch, Furbee	Disclosed expert.
19	Lees-Haley, Paul	2/3/2003 2/16/2003 2/16/2003 2/16/2003 3/17/2003 3/17/2003 3/28/2003 3/28/2003 4/18/2003 4/18/2003 5/2/2003 5/17/2003 5/17/2003 6/1/2003 6/1/2003 6/1/2003 7/17/2003 7/17/2003 7/17/2003 7/17/2003 7/17/2003 7/17/2003 8/2/2003 8/17/2003 8/17/2003 1/1/2003 1/1/2003 1/1/2003 1/1/2003 1/1/2003 1/1/2003 1/1/2003 1/1/2003 1/1/2003 1/1/2003 1/1/2003 1/1/2003 1/1/2003 1/1/2003 1/1/2003 1/1/2003 1/1/2003 1/1/2004 1/16/2004 1/16/2004 1/16/2004 1/16/2004 1/16/2004 1/12/2004	\$420.00 \$1,980.00 \$4,110.00 \$1,320.00 \$210.00 \$2,460.00 \$1,350.00 \$2,970.00 \$2,460.00 \$2,610.00 \$2,370.00 \$3,450.00 \$600.00 \$1,500.00 \$6,000.00 \$2,280.00 \$360.00 \$3,000.00 \$3,000.00 \$3,000.00 \$3,000.00 \$3,000.00 \$3,000.00 \$3,000.00 \$3,000.00 \$3,000.00 \$3,000 \$3,000.00 \$3,000 \$3,600,00 \$3,100,00	-Neuropsychological correlates of manganese exposure: A meta-analysis (2007) -A meta-analysis of the neuropsychological effects of occupational exposure to manganese (2006) -Methodological problems in the neuropsychological assessment of effects of exposure to welding fumes and manganese (2007)	-Furbee -Makuch, Furbee -Furbee, Hurtig	Disclosed expert.

6/2/2004	\$6,090.00		1	1
6/2/2004	\$4,440.00			
6/19/2004	\$7,260.00			
7/1/2004	\$2,040.00			
7/1/2004	\$12,112.00			<u> </u>
7/1/2004	\$1,830.00			
7/1/2004	\$150.00			
7/12/2004	\$60.00			
7/12/2004	1			
7/12/2004	\$3,600.00			
8/3/2004	\$5,391.04 \$3,642.00			
8/16/2004	-		•	
9/1/2004	\$7,415.00 \$2,100.00			
			1	
9/17/2004	\$840.00			
9/17/2004	\$13,491.06			
9/30/2004	\$16,835.50			
10/17/2004	\$11,516.70			
11/1/2004	\$14,040.00			
11/15/2004	\$3,690.00			
12/1/2004	\$1,740.00			
12/16/2004	\$7,980.00			
1/3/2005	\$8,973.70			
1/18/2005	\$17,061.15			
2/1/2005	\$780.00			
2/1/2005	\$12,639.90			
2/16/2005	\$19,709.25			
3/4/2005	\$31,674.90			
3/17/2005	\$245.00			
3/17/2005	\$12,425.00			
4/3/2005	\$17,575.00			
4/3/2005	\$280.00			
4/19/2005	\$3,535.00			
5/4/2005	\$22,201.15			
5/16/2005	\$1,050.00			
5/16/2005	\$15,857.71			
6/2/2005	\$11,760.00			
6/2/2005	\$1,050.00			
6/15/2005	\$35.00			
6/15/2005	\$21,818.26			
6/15/2005	\$1,225.00			
7/4/2005	\$3,580.00		[
7/18/2005	\$1,575.00			
8/5/2005	\$2,905.00			
8/5/2005	\$246.00			
8/22/2005	\$9,065.00			
8/22/2005	\$420.00			
9/16/2005	\$105.00			
10/14/2005	\$16.43			
10/14/2005	\$4,534.50			
10/29/2005	\$3,885.00			
10/29/2005	\$46.44	İ		
10/30/2005	\$2,065.00			
11/17/2005	\$210.00			
12/2/2005	\$1,117.65			
12/16/2005	\$2,625.00			
1/4/2006	\$5,600.00			
2/17/2006	\$3,182.00	1		
1 277 2007	\$200.00			
3/6/2006				
3/16/2006	\$13,489.18	I		
1	\$13,489.18 \$11,200.00 \$3,280.00			

		4/17/2006 4/17/2006 4/17/2006 5/1/2006 5/1/2006 5/1/2006 5/16/2006 6/1/2006 6/1/2006 6/1/2006 6/16/2006 6/16/2006 6/16/2006 7/3/2006 7/3/2006 7/3/2006 7/3/2006 7/3/2006 7/3/2006 7/3/2006 7/3/2006 8/1/2006 8/1/2006 8/1/2006 8/1/2006 8/1/2006 8/1/2006 1/1/2006 11/4/2006 11/4/2006 11/20/2006 11/20/2006 11/20/2006 11/20/2006 11/20/2006 11/20/2006 11/20/2006 11/20/2006 11/20/2006 11/20/2006 11/20/2006 11/20/2006 11/20/2006 11/20/2006 11/20/2006 11/20/2007 1/16/2007 2/16/2007 3/16/2007 4/16/2007 1/16/2007 1/11/2007 1/11/2007 1/11/2007 1/11/2007 1/11/2007 1/11/2007 1/11/2007	\$8,622.75 \$4,520.00 \$120.00 \$40.00 \$7,160.00 \$1,280.00 \$40.00 \$9,092.25 \$13,861.75 \$680.00 \$16,259.75 \$9,002.02 \$4,240.00 \$9,942.00 \$9,820.50 \$19,647.00 \$3,760.00 \$1,120.00 \$1,120.00 \$1,120.00 \$24,889.35 \$2,700.50 \$10,000.00 \$40.00 \$10,555.00 \$80.00 \$450.00 \$1,937.50 \$350.00 \$1,950.00 \$1,950.00 \$1,950.00 \$1,555.00 \$1,950.00			
20	Lippold, John C.	12/31/2003 4/25/2005 8/25/2005	\$6,900.00 \$3,300.00 \$1,100.00 \$11,300.00	-Analysis of Welding Fume from E6010 and B308-16 Electrodes (2005) -Analysis of Welding Fume from E7018 Electrodes (2004) -Analysis of Welding Fume from Lincore M Electrodes (2005)	-Furbee -Furbee	Disclosed expert.

21	M&O Consultants	12/28/1996 12/28/1996 7/2/1997 7/2/1997 7/22/1997 7/22/1997 8/13/1997 8/13/1997 10/6/1997 11/3/1997 12/23/1997 12/23/1997 12/23/1998 1/26/1998 3/23/1998 6/29/1998 8/25/1998 11/12/1998 11/12/1998 6/14/1999	\$2,400.00 \$2,400.00 \$1,200.00 \$5,216.52 \$16,400.00 \$3,200.00 \$10,210.40 \$7,840.95 \$6,000.00 \$2,700.00 \$7,596.36 \$7,058.00 \$6,896.09 \$800.00 \$2,400.00 \$2,400.00 \$2,000.00 \$10,394.58 \$8,876.00 \$6,895.31 \$6,764.33 \$2,600.00	See articles listed for Dr. Olanow.		M&O Consultants is affiliated with Dr. Olanow. Invoices reflect work done by Dr. Olanow.
22	Manning, Edward L.	6/6/2002 2/3/2003 4/2/2003 5/2/2003 7/1/2004 10/5/2005 1/10/2005 2/1/2005 3/18/2005 5/26/2005 6/14/2006 6/30/2006 7/13/2006 8/8/2006 9/27/2006 10/4/2006 2/28/2007 5/1/2007	\$150.00 \$200.00 \$555.00 \$1,305.00 \$720.00 \$200.00 \$2,000.00 \$400.00 \$4,192.82 \$3,000.00 \$400.00 \$1,600.00 \$7,500.00 \$1,000.00 \$1,850.00 \$200.00 \$200.00 \$2700.00 \$35,750.00	-Methodological problems in the neuropsychological assessment of effects of exposure to welding fumes and manganese (2007)	-Furbee, Hurtig	Disclosed expert.
23	North Shore University Hospital	8/13/2001 10/16/2006	\$3,500.00 \$4,089.00 <i>\$7,589.00</i>	-Differential diagnosis of Parkinsonism with [18F] fluorodeoxyglucose and PET (Antonini, Dhawan, Eidelberg, Feigen, Kazumata, Mandel, Margouleff) (1998) -Functional brain imaging in Parkinson's	-Eidelberg -Eidelberg -Eidelberg	North Shore University Hospital is affiliated with Dr. Eidelberg, a disclosed expert. Invoices reflect payments for

	disease (Carbon, Edwards, Eidelberg) (2003)	-Eidelberg	work done by Dr. Eidelberg.
	-Functional brain imaging of movement disorders (Edwards, Eidelberg) (2000)	Hurtig -Eidelberg	
	-Functional brain networks in movement disorders (Eidelberg) (2000)	-Eidelberg -Schapira, Hurtig, Eidelberg	
	-The role of radiotracer imaging in Parkinson's disease (Carbon, Dhawan, Eidelberg, Feigen) (2005)	-Eidelberg	
	-Quantitative brain PET: comparison of 2D and 3D acquisitions on the GE advance scanner (Chaly, Dahl, Dhawan, Eidelberg, Kazumata, Margouleff, Nakamura, Robeson, X-Teng) (1998)	Eidelberg, Sze	
	-SPECT imaging in Parkinson's disease (Dhawan, Eidelberg) (2001)		
	-The metabolic landscape of Parkinson's disease (Eidelberg) (1999)		
	(North Shore Long Island Jewish Research Institute) -Blinded positron emission tomography study of dopamine cell implantation for Parkinson's disease (Eidelberg, Fukuda, Ma, Nakamura) (2001)		
	-The role of functional neuroimaging in the differential diagnosis of idiopathic Parkinson's disease and multiple system atrophy (Eidelberg) (2004)		

			1	1		
24	Olanow, C. W.	See notes	See notes	-A double-blind	-Perl, Perl	Disclosed
				controlled trial of	(2)	expert.
				bilateral fetal nigral		
				transplantation in		Dr. Olanow
				Parkinson's disease	-Perl, Perl	was affiliated
				(2003)	(2))	with M&O
						Consultants
				-A fluorescent double	₅ ,	and is
				labeling method to	-Perl	affiliated with
				detect and confum a	0.1	Parkinson's Disease
				apoptotic nuclei in Parkinson's disease	-Schapira,	Research
				(2003)	Hurtig, Perl, Perl	Corporation.
				(2003)	(2)	See separate
				-Accumulation in Lewy	(2)	entries on
				bodies in sporadic	-Hurtig,	chart.
		İ		Parkinson's disease	Schapira,	Citare.
				(2000)	Sze, Perl	•
				(,	(2),	
				-Alzheimer's disease	Furbee	
			1	and Parkinson's disease:	1	
				distinct entities or	-Sze	
				extremes of a spectrum		
				of neurodegeneration?		
				(1998)	-Perl	
				-Blood manganese	Cahamina	
				correlates with brain	-Schapira, Hurtig	
				magnetic resonance	nutug	
				imaging changes in	-Schapira,	
				patients with liver	Hurtig,	
			i	disease (1996)	Perl, Perl	
				(11.1.1)	(2)	
				-Brain magnetic	-Hurtig,	
				resonance imaging in	Schapira,	
				multiple-system atrophy	Furbee	
		1		and Parkinson disease: a]	
				diagnostic algorithm	-Hurtig,	
				(2002)	Schapira,	
				Fotol niowal two wardants	Perl (2),	
				-Fetal nigral transplants survive, innervate the	Sze	
				striatum and improve	-Hurtig,	
				motor function in a	Schapira,	
				patient with Parkinson's	Schapha, Sze, Perl	
				disease (1995)	(2), Perl,	
				(/	Furbee	
				-Levodopa and the		-
				progression of	-Makuch,	
				Parkinson's disease	Schapira,	
				(2004)	Hurtig,	
		1		T 1 1 0	Eidelberg,	
				-Lewy-body formation is	Perl,	
				an aggresome-related	Furbee,	
				process: a hypothesis (2004)	Perl (2), Sze	
				(2007)	JEC	
					-Furbee,	
I		İ	l			

	-Magnetic resonance imaging in parkinsonism (1992) -Manganese intoxication and chronic liver failure (1994) -Manganese Intoxication in the Rhesus Monkey: A Clinical, Imaging, Pathologic, and Biochemical Study (1996)	Hurtig, Perl, Perl (2), Schapira, Sze, Eidelberg -Sze, Eidelberg, Hurtig, Schapira, Furbee, Perl, Perl (2) -Perl, Perl (2)
	-Manganese-induced parkinsonism and Parkinson's disease (2004)	-Schapira -Hurtig, Schapira, Furbee, Perl (2) -Sze
	-Manganism and Idiopathic Parkinsonism: Similarities and Differences (1994) -MRI and PET studies of manganese-intoxicated monkeys (1995)	-Sze -Hurtig, Schapira, Furbee, Perl (2), Sze, Perl -Perl, Perl (2) -Perl, Perl
	-Neuromelanin - containing neurons of the substantia nigra accumulate iron and aluminum in Parkinson's disease: a LAMMA study (1992) -Neurotoxicology of manganese (1995) -Occupation and parkinsonism in three movement disorders	-Hurtig, Schapira, Eidelberg, Sze, Furbee -Sze -Makuch
	clinics (2005) -Parkinson plus	

				syndrome: diagnosis using high field MR imaging of brain iron (1986) -Parkinsonism, manganese and brain imaging in liver failure (2002) -Progression after chronic manganese exposure (1993)	
				-Protein nitration in Parkinson's disease (1998) -Systemic exposure to proteasome inhibitors causes a progressive model of Parkinson's disease (2004) -The Neuropathology of manganese-induced Parkinsonism (2007)	
				-MR imaging of putamenal iron predicts response to dopaminergic therapy in parkinsonian patients (1990) -Occupation and Parkinson's disease (PD) onset age in three movement disorders clinics (2004) -Occupation and Parkinson's disease onset age in a movement disorders clinic (2004)	
25	Parkinson's Disease Research Corporation	10/10/1999 1/3/2000 1/30/2000 3/29/2000 5/20/2000 1/30/2001 3/7/2001 5/7/2001 7/10/2001	\$5,000.00 \$4,900.00 \$12,007.65 \$2,800.00 \$16,475.00 \$1,500.00 \$15,646.50 \$1,500.00 \$12,214.98	See articles listed for Dr. Olanow.	Parkinson's Disease Research Corporation is affiliated with Dr. Olanow. Payments are for work done

		8/21/2001 10/18/2001 11/20/2001 12/6/2001 5/12/2002 9/30/2002 10/6/2002 11/15/2002 12/1/2002 12/1/2003 2/17/2003 4/24/2003 6/21/2003 10/10/2003 10/10/2003 11/15/2003 2/8/2004 4/19/2004 4/19/2004 4/25/2004 6/3/2004 6/3/2004 6/8/2004 7/5/2004 8/5/2004 11/5/2004 11/5/2004 11/5/2004 11/5/2005 1/29/2005 2/10/2005 5/14/2005 5/14/2005 6/3/2005 9/30/2005 1/16/2006 2/3/2006 3/3/2006	\$15,685.57 \$10,549.00 \$100,000.00 \$100,000.00 \$31,356.50 \$250,000.00 \$9,000.00 \$940.00 \$11,322.16 \$1,500.00 \$90,000.00 \$18,000.00 \$18,886.70 \$18,200.00 \$18,344.12 \$12,000.00 \$15,031.20 \$12,000.00 \$15,031.20 \$12,000.00 \$16,794.02 \$14,379.81 \$18,671.18 \$9,355.15 \$12,979.96 \$18,692.69 \$14,442.20 \$11,877.53 \$6,000.00 \$27,750.00 \$27,750.00 \$29,032.70 \$37,500.00 \$27,750.00 \$29,032.70 \$37,500.00 \$25,001.89 \$48,750.00 \$22,500.00 \$23,250.00 \$23,250.00 \$27,000.00 \$27,000.00 \$27,000.00 \$27,000.00 \$27,000.00 \$27,000.00 \$27,000.00 \$27,000.00 \$27,000.00 \$27,000.00 \$27,000.00 \$27,000.00 \$27,000.00 \$27,000.00 \$27,000.00 \$27,000.00 \$27,000.00 \$27,000.00 \$27,500.00			by Dr. Olanow.
26	The Parkinson's	3/24/2004	\$200,000.00	-Occupation and	-Furbee	The
	Institute	11/5/2004 11/12/2004 1/26/2005 4/15/2005 9/22/2005 2/6/2006 6/1/2006 9/19/2006 4/23/2007	\$20,000.00 \$325,000.00 \$325,000.00 \$325,000.00 \$373,603.19 \$361,140.30 \$339,270.00 \$196,000.00	Parkinson's disease onset age in a movement disorders clinic. (Field, Robert D., Goldman SM, Langston, J. William, Olanow, Warren, Tanner, Caroline M.) (2004)	-Makuch -Hurtig, Schapira,	Parkinson's Institute is conducting a prospective study.

		4/30/2007 6/30/2007 8/31/2007 10/31/2007	\$196,000.00 \$125,000.00 \$125,000.00 \$125,000.00 \$3,361,013.49	-Occupation and Parkinson's disease (PD) onset age in three movement disorders clinics (Field, RD, Goldman, SM, Olanow, CW, Tanner, CM) (2004) -Occupation and parkinsonism in three movement disorders clinics (Field, Robert D., Goldman, SM, Langston, J. William, Olanow, C. Warren, Tanner, Caroline M., Watts, R.L.) (2005)	Furbee, Perl (2)	
27	Perl, Daniel P.	11/19/2004 12/20/2004 2/9/2005 2/22/2005 4/2/2005 6/1/2005 7/14/2005 8/26/2005 10/12/2006 5/1/2006 10/3/2006 10/10/2007	\$43,750.00 \$23,300.00 \$6,550.00 \$47,716.50 \$26,450.00 \$87,892.18 \$40,500.00 \$7,671.00 \$4,950.00 \$4,750.00 \$5,100.00 \$2,550.00 \$7,800.00 \$318,129.68	-Neurodegeneration. In Oppenheimer's Diagnostic Neuropathology, A Practical Manual. Lond: Hodder Arnold. (2006) -A double-blind controlled trial of bilateral fetal nigral transplantation in Parkinson's disease. (2003) -A fluorescent double labeling method to detect and confum a apoptotic nuclei in Parkinson's disease. (2003) -Accumulation in Lewy bodies in sporadic Parkinson's disease. (2003) -Alzheimer's disease and Parkinson's disease distinct entities or extremes of a spectrum of neurodegeneration? (1998) -Evolution of diagnosis in early Parkinson's disease. (2000) -Lewy-body formation is an aggresome-related process: a hypothesis (2004)	- Perl (2) - Perl, Perl (2) - Perl, Perl (2) -Perl -Schapira, Hurtig, Perl, Perl (2) -Schapira, Hurtig, Perl, Perl (2) -Hurtig, Schapira, ,Sze, Perl, Perl (2), Furbee -Sze, Eidelberg, Hurtig, Schapira, Furbee, Perl, Perl (2) -Perl, Perl (2) -Perl, Perl (2)	Disclosed expert.

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				-Manganese intoxication in the rhesus monkeys: a clinical, imaging, pathologic and biochemical study (1996)	-Perl, Perl (2) -Perl, Perl (2)	
				-MRI and PET studies of manganese-intoxicated monkeys. (1995)	- Eidelberg, Hurtig, Schapira, Sze, Furbee	
				-Neuromelanin - containing neurons of the substantia nigra accumulate iron and aluminum in Parkinson's disease: a LAMMA study. (1992)		
				-Protein nitration in Parkinson's disease. (1998)	.	
				-Systemic exposure to proteasome inhibitors causes a progressive model of Parkinson's disease. (2004)		
				-The Neuropathology of manganese-induced Parkinsonism. (2007)		
28	Racette, Brad A.	5/3/2005	\$2,000.00	-Data and materials produced under Court Order in Welding Fume Products Liability Litigation	-Makuch -Schapira, Hurtig	Payment was in connection with deposition in Boren.
				-Industrial and occupational exposures and Parkinson's disease (2005)	-Hurtig, Makuch, Schapira, Furbee, Perl (2)	
				-Prevalence of parkinsonism and relationship to exposure in a large sample of	-Furbee -Furbee	
				Alabama welders (2005)	-Schapira, Eidelberg, Sze	
				-Reply from Authors. (2001)	_	
					Schapira,	

				-Reply to Sadek's Letter to the Editor. (2001) -The impact of litigation on neurologic research (December 2006) -Welding related parkinsonism: clinical features, treatment, and pathophysiology (2001) -[18F] FDOPA PET and clinical features in parkinsonism due to manganism (2005) -[18F]FDOPA PET and clinical features in a Parkinson's disease patient with' manganese exposure. (2002) -A multi-incident, Old-Order Amish family with PD. (2002) -A rapid method for mass screening for parkinsonism (2005)	Eidelberg, Sze -Hurtig, Furbee, Perl (2), Schapira -Sze, Eidelberg -Furbee -Makuch	
29	Riley, David, M.D.	10/22/2006 1/7/2007	\$31,025.13 \$27,500.00 \$58,525.13	-Autonomic nervous system testing may not distinguish multiple system atrophy from Parkinson's disease (2003)	-Furbee	Disclosed expert.
30	Robert A. Hauser Consulting Inc.	8/8/2005 10/7/2005 2/28/2006 5/19/2006 5/25/2006 11/20/2006 11/23/2006 12/7/2006 2/16/2007 7/22/2007 9/4/2007 11/28/2007	\$3,741.08 \$1,677.12 \$733.78 \$90,750.00 \$1,476.52 \$1,013.83 \$111,000.00 \$1,510.29 \$3,000.00 \$523.34 \$13,312.50 \$643.20 \$595.97	-Fetal nigral transplants survive, innervate the striatum and improve motor function in a patient with Parkinson's disease (1995)	-Perl	Robert A. Hauser Consulting Inc. is affiliated with Robert A. Hauser, a disclosed expert.
31	San Francisco University Foundation	3/1/2004	\$150.00	-Blood manganese and alcohol consumption interact on mood states among manganese alloy	-Sze	

	production workers. (Bowler, Rosemarie M.)	-Furbee	
	-Dose-Effect Relations Between Manganese	-Furbee	
	Exposure and Neurological, Neuropsychological and Pulmonary Function in	-Sze	
	Confined Space Bridge Welders (Bowler, Rosemarie) (2006)	-Furbee, Hurtig	
	-Issues and Neurological Risk Assessment for Occupational Exposures: The Bay	-Sze	
	Bridge Welders. (Bowler, Rosemarie M.) (2006)	-Sze, Hurtig	
	-Manganese accentuates adverse mental health effects associated with alcohol use disorders.	-Sze, Hurtig	
	(Bowler, Rosemarie M.) (2002)	- Hurtig, Furbee, Sze,	
	-Manganese exposure: Neuropsychological and neurological symptoms and effects in welders	Schapira	
	(Bowler, Rosemarie M. Diamond, Emily, Drezgic, Marija, Gysens, Sabine, Nakagawa, Sanae) (2006)		
	-Manganese neurotoxicity, a continuum of		
	dysfunction: results from a community based study. (Bowler, Rosemarie M.) (1999)		
	-Nervous system dysfunction among workers with long-term exposure to manganese. (Bowler, Rosemarie M.) (1994)		
	-Neuropsychiatric effects of manganese on mood. (Bowler, Rosemarie M.) (2003)		
	-Neuropsychological sequelae of exposure to		

32	Schapira, Anthony	8/28/2003 6/7/2004 8/24/2004 12/22/2004 2/1/2005 4/22/2005 5/31/2005 1/26/2006 3/17/2006 4/20/2006 8/2/2006 11/30/2007 10/24/2007	\$2,750.00 \$16,800.00 \$16,726.00 \$8,400.00 \$9,000.00 \$18,000.00 \$4,000.00 \$4,283.53 \$17,200.00 \$12,823.34 \$38,800.00 \$65,736.51 \$75,274.25 \$8,800.00 \$8,800.00 \$307,393.63	welding fumes in a group of occupationally exposed men (Gysens, Sabine, Hartney, Christopher, Bowler, Rosemarie M.) (2003) -Etiology of Parkinson's disease (2006)	-Perl (2)	Disclosed expert.
33	Sethi, Kapil D., M.D.	9/20/2005 2/1/2006 3/31/2006 5/26/2006 6/26/2006 6/30/2006 8/28/2006 9/15/2006 9/30/2006 10/31/2006 11/30/2006 3/19/2007 4/30/2007 9/1/2007 12/4/2007	\$8,534.34 \$11,103.65 \$11,324.00 \$20,395.51 \$20,435.61 \$44,779.90 \$15,669.30 \$46,323.86 \$14,874.65 \$21,172.67 \$17,129.25 \$14,251.74 \$26,387.21 \$5,600.00 \$9,800.00	-SIC task force appraisal of clinical diagnostic criteria for Parkinsonian disorders (2003) -The role of radiotracer imaging in Parkinson's disease (2005)	-Hurtig, Schapira -Hurtig, Schapira	Disclosed expert.
34	Stampfer, Meier, M.D.	6/1/2005 6/1/2005 7/2/2005 3/5/2006 6/12/2006 12/4/2006 6/21/2007	\$9,000.00 \$13,250.00 \$1,000.00 \$715.00 \$11,275.00 \$22,825.00 \$5,775.00 \$63,840.00	-Number of Parkinson's disease deaths among male welders over time: National Center for Health Statistics mortality data files, 1985-1999 -Welding occupations and Parkinson's disease mortality: analysis of National Center for Health Statistics Mortality Data, 1985-1999 (2006)	-Makuch	Disclosed expert. Dr. Stampfer is affiliated with the Harvard School of Public Health. See separate entry.
35	Stern, Matthew B., M.D.	3/6/2006 4/30/2006 5/1/2006	\$9,100.00 \$9,100.00 \$17,550.00	-Diagnostic accuracy of [99mTc]TRODAT-1 SPECT imaging in early	-Eidelberg	Disclosed expert.

			\$35,750.00	Parkinson's disease (2004) -The preclinical detection of Parkinson's disease: ready for prime time? (2004) -Magnetic resonance imaging in Parkinson's disease and parkinsonian syndromes (1989)	-Perl, Perl (2) -Sze	
36	Swift, Douglas A.	4/19/2004 4/25/2005 9/20/2006 10/1/2006 10/25/2006	\$6,400.00 \$3,400.00 \$7,400.00 \$12,800.00 \$2,851.86 \$32,851.86	-The Prevalence of Cognitive Malingering in Persons Reporting Exposure to Occupational and Environmental Substances (2006)	-Furbee	Disclosed expert.
37	Tanner, Caroline M.	3/1/2001	\$3,000.00	-Environmental risk factors in Parkinson's disease (August 1990) -(abstract) Occupation and risk of Parkinson's disease (PD): a preliminary investigation. of Standard Occupational codes (SOC) in twins discordant for disease (2003) -Levodopa and the progression of Parkinson's disease (2004) -Occupation and parkinsonism in three movement disorders clinics (accepted 2004, published 2005) -Occupation and Parkinson's disease onset age in a movement disorders clinic (2004) -Occupational and environmental causes of parkinsonism (1993) -(abstract) Welding and risk of Parkinson's disease (2004)	-Furbee -Furbee -Schapira, Hurtig - Hurtig, Schapira, Furbee -Furbee -Hurtiga, Schapira -Schapira -Schapira, Hurtig, Furbee -Makuch	Dr. Tanner is affiliated with The Parkinson's Institute.

38	Tarsy, Daniel, M.D.	8/15/2005 9/30/2005	\$8,726.10 \$1,500.00	-(abstract) Occupation and Parkinson's disease (PD) onset age in three movement disorders clinics (2004) -Diagnostic Criteria for Parkinson's Disease	-Sze, Schapira	Disclosed expert.
		10/19/2005 1/4/2006 3/23/2006 4/14/2006 4/24/2006 6/12/2006 9/8/2006 9/19/2006	\$3,000.00 \$12,899.27 \$6,842.06 \$5,000.00 \$3,500.00 \$2,000.00 \$15,575.00 \$856.10	(2005)	,	
39	University of Alabama Neurology/Parkinson's Research Fund	8/25/2006	\$5,000.00	-Occupation and Parkinson's disease (PD) onset age in three movement disorders clinics (Field, RD, Goldman, SM, Langston, JW, Olanow, CW, Tanner, CM, Watts, RL) (2004)	-Makuch	The University of Alabama is affiliated with Dr. Watts, a disclosed expert.
40	University of Arkansas for Medical Sciences	8/14/2006 8/14/2006 8/15/2006 9/5/2006 9/18/2006	\$6,375.00 \$4,000.00 \$2,500.00 \$6,000.00 \$8,500.00 \$27,375.00	-A brief history of the neurobehavioral toxicity of manganese: some unanswered questions (McMillan, DE) (1999)	-Schapira	The University of Arkansas is affiliated with Dr. Harik, a disclosed expert. Payments are for work done by Dr. Harik.
41	University of British Columbia	12/23/1997	\$1,500.00	-A case-control study of Parkinson's disease in a horticultural region of British Columbia (Calne, Donald B., Snow, B.J.) (1994) -A double-blind controlled trial of bilateral fetal nigral transplantation in Parkinson's disease. (Sossi V, Stoessl, A.J.) (2003) -Alzheimer's disease and Parkinson's disease: distinct entities or extremes of a spectrum of neurodegeneration?	-Schapira, Hurtig, Furbee -Perl, Perl (2) -Schapira, Hurtig, Perl, Perl (2) -Perl (2) -Hurtig, Makuch, Schapira, Furbee,	The University is affiliated with Dr. Calne. Payment was in connection with the Hite case.

ı		1	(Calne, Donald B.)	Perl (2),
			(1998)	Sze
			(1990)	
				-Schapira
			-Autosomal dominant	-Венарна
				-Furbee
ļ			parkinsonism associated	-ruibee
			with variable synuclein	Tank
			and tau pathology.	-Furbee
			(Stoessl, A.J.) (2004)	
	İ			-Schapira,
			-Chronic manganese	Hurtig
			intoxication (Calne,	
			Donald B., Wolters, Erik	
			C.) (1989)	
•				-Hurtig,
1				Schapira,
				Furbee,
				Perl, Perl
			-Cock gait in manganese	(2), Sze
			intoxication (Calne,	`"
			Donald B.) (1997)	-Hurtig,
			Dollard D.) (1997)	Schapira,
			-Experimental and	Perl,
		!	Clinical	Furbee,
			Neurotoxicology (Calne,	Perl (2),
	İ		Donald) (2000)	Sze
			-Criteria for diagnosing	-Hurtig,
			Parkinson's disease	Schapira,
1			(Calne, D. B.) (1992)	Sze, Perl
				(2), Perl,
			-Is the neuropathological	Furbee
1			"gold standard"	
			diagnosis dead?	-Furbee,
			Implications of	Hurtig,
			clinicopathological	Perl, Perl
			findings in an autosomal	(2),
			dominant	Schapira,
			neurodegenerative	Sze,
			disorder. (Calne, Donald	Eidelberg
			B.) (2004)	Eldelooig
			D.) (2007)	-Schapira
-]	-Levodopa failure in	-ponapira
				Schanira
			chronic manganism.	-Schapira
			(Calne, Donald B.)	
			(1994)	III
				-Hurtig,
				Schapira,
1				Furbee
1			-Long-Term Progression	-Schapira,
1			in Chronic Manganism:	Hurtig,
			Ten Years of Follow-	Furbee
]	up. (Calne, DB) (1998)	
				-Perl, Perl
				(2)
			-Manganese Intoxication	`
			in the Rhesus Monkey:	
1			A Clinical, Imaging,	-Schapira,
1			Pathologic, and	Hurtig
1			i amoiogio, and	
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1 1	Dischamical Study	1 1
	Biochemical Study. (Shinotoh H,	
	Vingerhoets, F., Beal,	
	M.F., Calne, Donald B.,	
	Hewitt, K.A., Snow,	
j	B.J.) (1996)	Eidelberg,
		Schapira,
		Hurtig,
	-Manganism and	Furbee,
	idiopathic parkinsonism	Sze
	similarities and	
	differences (Calne,	-Hurtig,
	Donald B.) (1994)	Schapira,
		Perl,
		Furbee,
	N	Perl (2),
	-Neurotoxicology of	Sze
	manganese. (Calne,	-Hurtig,
	Donald B.) (1995)	Perl, Perl
	-Occupational and	(2), Sze,
	environmental risk	Furbee
	factors for Parkinson's	
	disease (Lai, BCL, Tsui,	-
	JKC) (2002)	Eidelberg,
		Hurtig,
	-Occupational risk	Schapira
	factors in Parkinson's	
	disease (Calne, Donald	-Schapira,
	B., Marion, S.A.,	Hurtig
	Schulzer, M., Tsui, JKC	,
	Wang, Y.) (1990)	1
	-Parkinson's disease: a	
	case-control study of	
	occupational and	
	environmental risk	
	factors (Calne, Donald	
	B., Hertzman, C, Snow,	
	B.J., Wiens, M.) (1990)	
	-Pathogenesis of	
	idiopathic	
	parkinsonism. (Calne,	
	Donald B., Uitti RJ) (1993)	
	(1393)	
	-Positron emission	
	tomography after MPTP	:
	Observations relating to)
	the cause of Parkinson's	
	disease (Calne, Donald	
	B., Adam, MJ,	
	Ammann, W,	
	Bergstrom, M, Harrop,	
	R, Laihinen, Arto,	
	Martin, WRW, Pate, B.D., Rogers, J, Ruth,	
	T.J., Sayre, C, Stoessl,	
	A.J.) (1985)	
	I	1

				-Presynaptic and post synaptic striatal doparminergic function in patients with manganese intoxication: a positron emission tomography study. (Shinotoh H, Snow, B.J., Takahashi, H.) (1997) -Progression after chronic manganese exposure (Calne, Donald B.) (1993) -Sympathetic skin response and RR interval variation in manganism and a comparison with Parkinson's disease (Calne, Donald B.) (1993) -The natural history of neurological manganism over 18 years (Calne, Donald B., Schulzer, M.) (2007) -The role of radiotracer imaging in Parkinson's disease (Stoessl, A.J.) (2005)		
42	University of Minnesota – Biomedical Info Service	5/12/2005 9/14/2005 7/11/2006 3/12/2007 8/9/2007 10/5/2007	\$434.00 \$152.00 \$868.68 \$96.00 \$90.00 \$42.00 \$1,682.68	-Amyotrophic lateral sclerosis and occupational history. A pilot case-control study (Dolliff, G., Roelofs, R.I., Smith, S.A., Strickland, D) (1996) -Diffusion abnormalities of the globi pallidi in manganese neurotoxicity. (Casey, S., Clark HB, Filice, R.W., Woon C) (2004)	-Hurtig -Perl (2), Hurtig, Schapira	
43	University of Pittsburgh Physicians	4/18/2006	\$1,650.00	-Employment as a welder and Parkinson disease among heavy equipment manufacturing workers (Gula, MJ, Marsh, Gary M.) (2006)	-Furbee, Hurtig, Makuch, Schapira, Perl (2)	Dr. Lisa Morrow, a treating doctor in Peabody, is affiliated with University of Pittsburgh Physicians.

				-Manganese levels in a jaundiced long term total parenteral nutrition patient: potentiation of haloperidol toxicity? Case report and literature review. (Mehta RK, Reilly JJ) (1990) -Manganese superoxide dismutase protects against 6-hdroxydopamine injury in mouse brains (Callio, J, Chu, C.T., Oury, T.D.) (2005)	-Hurtig, Schapira	Invoice reflects payment in connection with Dr. Morrow's deposition.
44	University of Rochester	12/5/2006 2/12/2007 7/27/2007 8/29/2007	\$12,363.00 \$1,500.00 \$12,500.00 \$2,000.00 \$28,363.00	-A Mortality Odds Ratio Study of Welders and Parkinson Disease (Eisenberg, Katherien W.) (2007) -Evolution of diagnosis in early Parkinson's disease. (McDermott, Michael P.) (2000) -Levodopa and the progression of Parkinson's disease (Kieburtz, K., Oakes, D, Rudolph, A., Shoulson, I) (2004) -The clearance of manganese chloride in the primate (Cox, C., Hamada, R., Newland, M. Christopher, Oberdoster, G., Weiss, Bernard) (1987) -The role of radiotracer imaging in Parkinson's disease (Holloway, R., Kieburtz, K.) (2005) -Translocation of Inhaled Ultrafine Manganese Oxide Particles to the Central Nervous System. (Eider, Alison, Feikert, Tessa, Finkelstein, Jason, Gelein, Robert, Oberdörster, Günter, Opanashuk, Lisa, Silva, Vanessa) (2006) -Visualizing manganese	-Furbee, Makuch -Perl, Perl (2) -Schapira, Hurtig -Hurtig -Schapira, Hurtig -Furbee -Hurtig, Sze, Schapira, Perl (2), Perl, Schapira -Makuch, Schapira, Furbee, Hurtig	University of Rochester is affiliated with Dr. Kieburtz, a disclosed expert. Payments reflect work done by Dr. Kieburtz.

				in the primate basal ganglia with magnetic resonance imaging (Ceckler, Toni L., Weiss, Bernard) (1989) -Welding and Parkinson disease: is there a bond? (Kieburtz, K, Kurlan, R) (2005)		
45	University of Texas Health Center	4/1/1999	\$1,500.00	-Influence of heat stress on arterial baroreflex control of heart rate in the baboon. (Gorman, A.J., Proppe, D.W.) (1982) -Lewy-body formation is an aggresome-related process: a hypothesis (DeMartino, G.N.) (2004) -MRI brain iron and experimental Parkinson's disease. (Hall S, Rutledge JN, Schallert T) (1992)	-Furbee -Schapira, Hurtig, Perl (2) -Sze	Payment in connection with deposition in Halfacre case.
46	U. S. Department of Labor/OSHA	4/17/1998 5/3/2005 6/1/2005 12/7/2006	\$11.60 \$49.40 \$13.48 \$246.00 \$320.48	-Compliance Issues: Manganese Exposure During Welding Operations (Franek, Barbara) (1994) -Control of Welding Hazards in Defense Industries, Special Bulleting No. 5, US Department of Labor (1942)	-Hurtig	
47	Washington University	2/14/2006 7/13/2006 8/23/2006	\$28,351.88 \$46,100.13 \$10,600.00 \$85,052.01	-[18F] FDOPA PET and clinical features in parkinsonism due to manganism (Antenor, J.A., Kotagal, V, Mc-Gee-Minnick, L., Moerlein, S.M., Perlmutter, Joel S., Racette, Brad A., Videen, T.O.) (2005) -[18F]FDOPA PET and clinical features in a Parkinson's disease patient with' manganese exposure. (Kotagal, V, Perlmutter, Joel S., Racette, Brad A.,	-Hurtig, Furbee, Peri (2), Schapira -Sze, Eidelberg -Furbee	Payments were made in connection with discovery served on Dr. Brad Racette and Washington University.

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1	1		Videen, T.O., Antenor,	-Schapira,	
Į			J, McGee-Minnich, L)	Hurtig	
			(2002)		
					İ
	i		-A multi-incident, Old-	-Makuch	
			Order Amish family		
			with PD. (Goate, A.,		
			Lin, J., Perlmutter, J.S.,		
			Racette, B.A., Rundle,	-Schapira,	
			M., Saccone, N.L.,	Eidelberg,	
	1		Smemo, S., Suarez, B.,	Sze	
			Wang, J.C.) (2002)	į	
			, , , ,	-Schapira,	1
	1		-A rapid method for	Hurtig	
			mass screening for		ľ
			parkinsonism (Evanoff,		
i l			Bradley A., Good, Laura	-Schapira,	
			M., Jennings, Danna,	Sze,	
	1		Perlmutter, Joel S.,	Hurtig,	
			Racette, Brad A.,	Furbee,	
			Tabbal, Samer D.)	Perl,	
	1		(2005)	Eidelberg	
			`/		
		1	-Industrial and		
† 			occupational exposures		
	1		and Parkinson's disease		
			(Racette, Brad A.)		
			(2005)		
			,		
1			-Prevalence of		
			parkinsonism and		
			relationship to exposure		
			in a large sample of		
			Alabama welders		
			(Evanoff, Bradley A.,		
			Good, Laura M.,		
			Perlmutter, Joel S.,		
			Racette, Brad A.,		
1			Tabbal, Samer D.)		
			(2005)		
					1
			-The impact of litigation		
			on neurologic research		
			(Perlmutter, Joel S.,		
			Racette, Brad A.,		
			Wrisberg, CA)		
			(December 2006)		
			-The role of radiotracer		
			imaging in Parkinson's		
			disease (Powers, W.)		
			(2005)		
			-Welding related		
			parkinsonism: clinical		
			features, treatment, and		
			pathophysiology		ļ
			(McGee-Minnich, L.,		
			Mink, J.W., Moerlein,		
	į l		S.M., Perlmutter, Joel S.,		
			Racette, Brad A.,		
1 1	l l		I		ı

				Videen, T.O.) (2001)		
48	Watts, Ray L.	6/20/2001 7/3/2001 8/23/2001 12/28/2005 1/31/2006 4/5/2006 5/1/2006 6/26/2006 7/25/2006 8/10/2006 8/25/2006 2/17/2007 2/18/2007 3/24/2007 6/25/2007	\$5,000.00 \$1,368.28 \$6,750.66 \$10,938.10 \$7,000.68 \$2,625.00 \$6,721.50 \$10,000.00 \$10,000.00 \$10,000.00 \$20,000.00 \$10,633.60 \$6,250.00 \$5,000.00 \$25,625.00	-Occupation and parkinsonism in three movement disorders clinics (accepted 2004, published 2005)	-Hurtig, Schapira, Furbee, Perl (2)	Disclosed expert.
49	Wrisberg, Carrie	See separate entry for Washington University.	See separate entry for Washington University.	-The impact of litigation on neurologic research (December 2006)	-Schapira, Eidelberg, Sze	Wrisberg is counsel for Racette and Washington University. Checks made payable to Washington University were delivered in care of Ms. Wrisberg.

In Re: Welding Fume Liability Litigation
In Camera Submission of Privileged Payments

Date: F	. ເກ		4				w	2		72
Date: February 14, 2008			A constitution of the cons			International Corp.	Medical Center Environ	Duke University		Payee
						12/26/2005	9/30/2003			Invoice date(s)
						\$3,498.00	\$6.516.15			Payment amounts and total
			-Pharmacokinetic Modeling of Manganese. III. Physiological Approaches Accounting for Background and Tracer Kinetics (Covington) (2007)	-The effects of manganese in air (Clewell, Crump) (2004) (Environ Health Sciences Institute)	-State-of-the-Science Review: Does Manganese Exposure During Welding Pose a Neurological Risk? (Santamaria) (2007)	Pretermination of an Occupational Exposure Guideline for Manganese Using the Benchmark Method, Risk Analysis (Clewell, Crump, Lawrence) (2003)				Article(s) / listing related to payee
		1	-Furbec	-Sze	-Furbee	-Size			Article Appears	Expert(s) On Whose List
				Issues related to welding fume litigation. In addition, Dr. Santamaria billed three hours of time on the same project, for a total of \$495.	issues related to welding fame litigation. 2005 payment for time spent by a statistician at Environ on	Attomey Work Product - Undisclosed, non-testifying expert. 2003 payment for time spent consulting with Dr. Clevell Co.	The work product claim as to this entry was withdrawn and the information was provided to plaintiffs on February 6, 2008.			Basis for Privilege

Date: February 14, 2008 Confidential

In Re: Welding Fume Liability Litigation
In Camera Submission of Privileged Payments

6					-						¥t.
International Epidemiology Institute					,						Payee
11/6/2001 11/30/2001 3/1/2002 6/4/2002											Invoice date(s)
\$4,600.00 \$6,781.00 \$13,500.00 \$7,800.00										\$3,900.00	Payment amounts and total
-A cohort study of Parkinson's disease and other neurodegenerative disorders in Danish welders (Blot, Cohen) (2005)	-Welding occupations and Parkinson's disease mortality: analysis of National Center for Health Statistics Mortality Data, 1985-1999 (Stampfer) (2006)	-Number of Parkinsen's disease deaths among male welders over time. National Center for Health Statistics mortality data files, 1985-1999 (Stampfer)	-The role of radiotracer imaging in Parkinson's disease (Lange) (2005)	-The pathogenesis of neurodegenerative disease: neurotoxic mechanisms of actions and genetics (Feldman) (1999)	-Welding fumes in steel fabrication (Drinker) (1944)	-Ventilation in Are Welding with Coated Electrodes (Drinker, Tebbens) (1941)	-The Association of Expired Nitric Oxide with Occupational Particulate Metal Exposure (Christiani, Flauser, Herrick, Kim, Wand) (2003)	-Exposure to Fuel - Oil Ash and Welding Emissions During the Overhaul of an Oil-Fired Boiler (Christianí, Hauser, Herrick, Liu, Smith, Williams, Woodin) (2005)	-Estimation of Personal Exposures to Particulate Matter and Metals in Boiler Overhaul Work (Christiani, Hauser, Herrick, Liu, Smith, Williams, Woodin) (2005)	Cobb, Drinker) (1934)	Article(s) / listing related to payee
-Makuch, Schapira, Hurtig, Perl (2), Furbee	-Makuch	-Makuch	-Schapira, Hurtig	-Perl, Perl (2)	-Schapira	-Furbee	-Furbce	-Furbee	-Furbee	Perl, Hurtig, Schapira, Szc	Expert(s) On Whose List Article Appears
Attorney Work Product - Undisclosed, non-testifying expert. Invoices reflect time spent consulting with Defendants on issues related to welding time litigation. These invoices were not for										with Harvard. The researcher is not the author of any of the listed articles	Basis for Privilege

In Re: Welding Fume Liability Litigation In Camera Submission of Privileged Payments

			× 7.5	4		7 Jenk		¥E
			Kim, Yangho			Jenkins, Neil T		Payee
		5/14/2004	11/8/2001 11/8/2001 3/10/2003		1/25/2005	8/03/2004 8/03/2004	9/3/2002 12/4/2002 3/31/2003 5/12/2003 5/12/2003 12/1/2003 1/6/2004 7/2/2004 3/4/2005	Invoice date(s)
		\$7,519.45 \$17,219.45	\$4,950.00 \$4,950.00 \$2,700.00		\$350.00 \$7,320.50	\$5.570.50 \$1,400.00	\$17,900.00 \$9,500.00 \$9,500.00 \$24,200.00 \$25,950.00 \$27,750.00 \$6,750.00 \$6,750.00 \$8,100.00 \$8,100.00 \$8,100.00 \$8,100.00 \$7,981.00 \$87,981.00	Payment amounts and total
-Dopamine transporter density is decreased in Parkinsonian patients with a history of manusiness exposure: what does it mean? 7,0003	-Calcification mimicking manganess-induced mereased signal intensities in T1-weighted MR images in a patient taking berbal medicine: case report (2003)	shipbuilders (2006)	Manganese does not after the severe neurotoxicity of MPTP (2007) A retrospective cohort study of Parkinson's disease in Korean			 -Fate of manganese associated with the inhalation of welding fames: potential neurological effects (2005) 	-Parkinson's disease and other basal ganglia or movement disorders in a large nationwide cohort of Swedish welders (Blot, Brandt, Ekbom, Fored, Fryzek, McLaughlin, Nisc, Sjogten) (2006)	Article(s) / listing related to payee
-Sze, Hurtig,	-Sze, Hurtig	Schapira, Hurtig, Furbee	-Furbee -Makuch			-Furbee	-Makuch Hudig, Furbec, Perl (2), Schapira	Expert(s) On Whose List
		related to welding fume litigation.	Attorney Work Product - Undisclosed, non-testifying expert. Payments for rime soons consulting with Defendants on seems	Two August 3, 2004 invoices were combined previously.	Payments for time spent consulting with Defendants on issues related to welding fume litigation.	Attorney Work Product - Undisclosed, non-testifying expert.	the funding of Danish and Swedish studies. Nor were they for time spent by IEI responding to discovery requests related to the Danish and Swedish studies. Finally, the total amount shown excludes \$127,500.00 billed for Dr. Lipworth, a disclosed expert, from March 2002 through March 2005, which are included on the listed invoices. Those three categories of payments have been disclosed on the chart provided to plaintiffs	Baxis for Privilege

Date: February 14, 2008 Confidential

In Re: Welding Fume Liability Litigation
In Camera Submission of Privileged Payments

In Re: Welding Fume Liability Litigation
In Camera Submission of Privileged Payments

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=	10	9		#:
McMillan, Grant	Lozano, Andres M.	Larrabee, Glenn J		Payee
12/23/2003 5/10/2004 11/6/2004 4/6/2005	3/5/2004 8/25/2004 4/13/2005 10/26/2005 3/20/2007	3/17/2004 9/36/2004		Invoice date(s)
\$922.03 \$5,181.79 \$46,427.39 \$40,000.00	\$6,250.00 \$6,875.00 \$6,250.00 \$5,000.00 \$625.00 \$625.00	\$1,812.50 \$375.00 \$2,187.50		Payment amounts and total
-Is electric are welding linked to manganism or Parkinson's discuse? (2005)	-Determining the position and sin of the subthalamic nucleus based on magnetic resonance imaging results in patients with advanced Parkinson disease (2004)	-Methodological problems in the neuropsychological assessment of effects of exposure to welding fumes and manganese (2007)	-Pallidal index on MRI as a target organ dose of mangarese: structural equation model analysis (2005) -Positron emission tomography (PET) in differentiating manganism from idiopathic parkinsonism (1999) -Three cases of Manganese induced parkinsonism, difference from idiopathic parkinsonism (1998) -Whole Blood Manganese Correlates with High Signal Intensities on T1-Weighted MRI in Patients with Liver Cirrhosis (2003)	Article(s) / listing related to payee
-Makuch, Schapira, Furbee, Hurtig	-Szc	-Furbee, Hurtig	Furbee, Peri (2) -Hurtig, Schapira, Furbee, Sze, Schapira, Hurtig, Eidelberg -Makuch, Sze, Ilurtig, Schapira	Expert(s) On Whose List Article Appears
Attorney Work Product - Undisclosed, non-testifying expert. Payments for time spent consulting with Defendants on issues related to welding funce hitigation.	Attorney Work Product - Undisclosed, non-testifying expert. Payments for time spent consulting with Defendants on issues related to welding fume litigation.	Attorney Work Product - Undisclosed, non-testifying expert. Payment in connection with meeting with Dr. Larrabee to evaluate him as a potential witness or consultant in welding fame litigation.		Basis for Privilege

In Re: Welding Fume Liability Litigation
In Camera Submission of Privileged Payments

In Re: Welding Fume Liability Litigation
In Camera Submission of Privileged Payments

		- 15							# 4
	England)								Payee Rohling, Martin
		12/19/2003 9/3/2004		5/31/2006 6/30/2006	1/5/2006	7/1/2005	3/5/2005	12/21/2004	Invoice date(s)
	\$18,772.25	\$553.25 \$18,219.00	\$111,240.00	\$7,475.00	\$7,008.00	\$5,000.00	\$24,385.00	\$3,000.00	amounts and total
		-ls electric are welding linked to manganism or Parkinson's disease? (McMillan, G) (2005)						- A mea-analysis of the neuropsychological effects of occupational exposure to manganese (2006)	Article(s) / listing related to payee
111	Furbee, Hurtig	-Makuch,						-Furbec, Makuch	Expert(s) On Whose List Article Appears
	Payments for time spent consulting with Grant McMillan or another researcher, who are affiliated with the University, on issues related to welding fume litigation.	Attorney Work Product - Undisclosed, non-testifying expert				G	Payments for time spent consulting with Defendants on issues related to welding firms literation	Attorney Work Product - Undisclosed, non-testifying expert.	Basis for Privilege

Date: February 14, 2008 Confidential