

CURRICULUM VITAE

Carl E. Fulwiler, M.D., Ph.D.

Office Address

Department of Psychiatry
University of Massachusetts Medical School
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EDUCATION

1978 B.A. New College, Hempstead, NY (Interdisciplinary Studies), *Summa Cum Laude*
1983 M.D. Washington University School of Medicine, St. Louis, MO
1995 Ph.D. Harvard University, Cambridge, MA (Neurobiology)

POSTDOCTORAL TRAINING

1983-1984 Internship, Barnes Hospital, St. Louis, MO (Internal Medicine)
1984-1987 Residency, McLean Hospital, Belmont, MA (Psychiatry)

AWARDS AND HONORS

1978 Phi Beta Kappa
1981 The Robert S. Billings Memorial Academic Award, Washington University
1981 Rock Sleyster Award for Psychiatry of the American Medical Association
1982 Alpha Omega Alpha
1983 Sigma Xi Honor Society for Scientific Research
1983 Merck Scholar Award
1983 John W. Kirk Scholastic Award, Washington University
1983 Irwin F. Levy Prize in Neurology, Washington University
1987 Dupont Warren Award in Psychiatry, Harvard Medical School
1996 Outstanding Service to Homeless, Massachusetts Department of Mental Health
1999-2003 Excellence in teaching in Psychiatry, Tufts University School of Medicine

LICENSURE & CERTIFICATION

1995 Massachusetts License #80208
1999 American Board of Psychiatry and Neurology Certification #46592
2008 American Board of Addiction Medicine, #099372

ACADEMIC APPOINTMENTS

1984-1987	Clinical Fellow, Department of Psychiatry, Harvard Medical School
1987-1988	Research Fellow, Department of Psychiatry, Harvard Medical School
1990-1994	Research Associate, Department of Cell & Developmental Biology, Harvard University
1991-1998	Research Fellow, Department of Psychiatry, Harvard Medical School
1995-1997	Instructor, Department of Psychiatry, Tufts University School of Medicine
1997-present	Assistant Professor, Department of Psychiatry, Tufts University School of Medicine
2003-present	Assistant Professor, Department of Psychiatry, UMass Medical School
2009-present	Full Faculty, Clinical and Population Health Research, Graduate School of Biomedical Sciences, UMass Medical School

HOSPITAL APPOINTMENTS

1994-1999	Director, Baycove Community Treatment Team, New England Medical Center
1994-present	Medical Staff, Clinical Neuroscience Service, Lemuel Shattuck Hospital
1996-2003	Full-time Staff, New England Medical Center
2003-present	Medical Staff, UMass Memorial Medical Center
2007-2008	Medical Staff, Beth Israel Deaconess Medical Center

ADMINISTRATIVE RESPONSIBILITIES

1994-1999	Medical Director, Baycove Community Treatment Team
1996-present	Director, Clinical Neuroscience Service, Lemuel Shattuck Hospital
1997-2003	Advisor, Youth Services Program for Massachusetts Division of Youth Services
2001-2004	Project Director, Forensic Access to Community Services (SAMHSA)
2008-present	Director, Mental Health Agency Research Network, UMass Medical School
2009-present	Acting Director, Center for Mental Health Services Research, UMass Medical School

COMMITTEE ASSIGNMENTS

2000-2003	Scientific Advisory Committee, General Clinical Research Center, Tufts-NEMC
2008-present	Executive Committee, Center for Mental Health Services Research, UMass Medical School (Chair)
2008-present	Faculty Committee, Center for Mental Health Services Research, UMass Medical School (Chair)
2008-present	Consumer Advisory Council, Center for Mental Health Services Research, UMass Medical School
2008-present	Faculty Search Committee, Center for Comparative Neuroimaging, UMMS Psychiatry
2009-present	Executive Committee, UMMS Department of Psychiatry
2009-present	Clinical Research Leadership Committee, UMMS Department of Psychiatry
2009-present	Scientific Council, UMass Medical School

PROFESSIONAL MEMBERSHIPS

Society for Neuroscience
 American Psychiatric Association
 Massachusetts Psychiatric Society, Alcohol and the Addictions Interest Group
 American Society of Addiction Medicine
 American Association of Community Psychiatrists
 American Academy of Psychiatry and the Law

COMMUNITY SERVICE RELATED TO PROFESSIONAL WORK

1996 Consultant to Physicians for Human Rights and Human Rights Watch investigation of mental illness in supermaximum prisons, provided material for the report “Cold Storage: Super-Maximum Security Confinement In Indiana” (New York: Human Rights Watch, 1997, www.hrw.org/reports/1997/usind/)

1996-present Mental health advisor to Span, Inc., a non-profit social services agency which provides reintegration support to ex-offenders

2004-2009 Board of Directors, Span, Inc.

2004-2008 Mental health expert for Office of the Attorney General, State of Connecticut. Monitored settlement agreement regarding mental health services in the Department of Corrections.

2005 Supporting petitioner for Brief *amici curiae* of Professors and Practitioners of Psychology and Psychiatry, U.S. Supreme Court Docket No. 04-495 (*Wilkinson v. Austin*), concerning psychological effects of solitary confinement.

2007-2009 Mental health expert for Disability Advocates, Inc. Monitoring settlement agreement regarding mental health services in New York State prison system.

TEACHING EXPERIENCE

1994-present Attending, Community Psychiatry Rotation, PGY-III Tufts-NEMC

1995-1996 Small Group Leader, TUSM-II Psychopathology course

1995-2004 Lecturer (Violence), TUSM-I Growth & Human Development course

1995-present Lecturer (Impulsivity and Violence), Tufts-NEMC residency

1995-present Preceptor (Mental Illness and Criminality), TUSM IV elective

1996-2001 Outpatient supervisor for PGY-III and IV residents

1996-2004 Coordinator, Resident rotations for Tufts-NEMC at Shattuck Hospital

1996-2006 Clerkship Director, TUSM-III Psychiatry Clerkship

1998-2004 Preceptor (Substance Abuse), TUSM IV elective

1995-2000 Attending, Substance Abuse rotation PGY-I, III residents

2001-2003 Co-Director - TUSM II Addiction Medicine Course

2003-present Attending, Forensic Psychiatry Rotation, PGY-IV, St. Elizabeth’s Hospital

2004-present Associate Residency Training Director for Tufts-NEMC residency at Shattuck Hospital

2004-present Lecturer (Addictive Disorders), PGY-III/IV Biological Psychiatry Seminar, UMMC

- 2004-present Lecturer (Addictive Disorders), UMMS II Mind, Brain & Behavior course
 2005-present Lecturer (Substance Abuse Treatment) Outpatient Seminar, PGY-III/IV, UMMC

PEER REVIEW AND EDITORIAL BOARDS

- 2005 - Ad hoc reviewer Psychiatry Research and Psychiatric Services

RESEARCH SUPPORT

ACTIVE

- 2009-2011 MISSION – Community Re-Entry for Women. National Institute of Justice. NIJ (Pinals) \$200,000, Co-Investigator.
 2009-2011 Effectiveness of a Statewide Public Mental Health Reentry Program from Harmonized Databases. NIH RC1 (Hartwell) \$1,000,000, Co-Investigator.
 2009-2010 A pilot study on enhancing mindfulness as an adjunct to anger treatment: Application of fMRI. UMMS Psychiatry Fellowship Award \$4,775, PI
 2009-2012 Memantine-Enhanced Buprenorphine Treatment for Opioid-dependent Young Adults. NIDA 1R01DA027138-01 (Gonzalez, G.) \$260,311, Co-Investigator.
 2008-2013 MISSION –Diversion & Recovery for Traumatized Veterans (MISSION– DIRECT VET). SAMHSA 1 SM058804-01 (Pinals). \$2,062,500, Co-investigator
 2008-2010 Development of a Self-report Measure of Dual Diagnosis Capability for Addiction and Mental Health Programs. SAMHSA \$163,873, Co-Principal Investigator
 2008-2009 Treatment of patients with schizophrenia who are smoking. Pfizer (Gonzalez), Co-Investigator.
 2007-2013 DMH Research Center of Excellence for Systemic and Psychosocial Research. Massachusetts Department of Mental Health. \$5,700,000, Acting Director

NON-ACTIVE

- 1988-1990 Charles A. Dana Foundation Fellowship, Harvard Medical School
 1990-1994 Scientist Development Award for Clinicians, NIMH
 1998-1999 Biological Subtypes of Violence in Major Mental Illness, NEMC Research Fund. \$35,025 (direct) 2/1/98-12/31/99, Principal Investigator.
 1999-2001 Neurochemical and Psychological Mediators of Aggression-Enhancement by Alcohol. NIH/CRR General Clinical Research Center, New England Medical Center, Principal Investigator.
 2001-2004 FACS: Forensic Access to Community Services. SAMHSA \$401,357/year, Principal Investigator.

PUBLICATIONS**Peer-reviewed articles:**

Emerton, B.C., Jerram, M., Deckersbach, T., Dougherty, D.D., **Fulwiler, C.**, Gansler, D.A. A comparison of voxel-based morphometry and volumetry methods in the context of the neural basis of aggression. *Brain Imaging and Behavior*, Published online July 1, 2009 (DOI: 10.1007/s11682-009-9075-2).

McLaughlin, N.C.R., Wiebe, D., **Fulwiler, C.**, Gansler, D.A. Differential contributions of lateral prefrontal cortex regions to visual memory processes. *Brain Imaging and Behavior*, 3 (2): 202-211, 2009.

Moore, D.W., Bhadelia, R.A., Billings, R.L., Fulwiler, C., Heilman, K.M., Rood, K.M.J., Gansler, D.A. (2009) Hemispheric connectivity and the visual-spatial divergent-thinking component of creativity. *Brain and Cognition*, 70(3): 267-272.

Gansler, D, McLaughlin, NC, Iguchi L, Jerram, M, Moore, DW, Bhadelia, R, **Fulwiler, C**: A multivariate approach to aggression and the orbital frontal cortex in psychiatric patients *Psychiatry Research: Neuroimaging* 171: 145-154, 2009.

Dinn WA, Gansler D, Moczynski N, **Fulwiler C**: Brain Dysfunction and Community Violence in Patients with Major Mental Illness *Criminal Justice & Behavior* 36 (2), 117-136, 2009.

Margolin A, , Schuman-Olivier Z, Beitel M, Arnold RM, **Fulwiler CE**, Avants SK: A Preliminary Study of Spiritual Self-Schema Therapy for Reducing Impulsivity in HIV-positive Drug Users. *Journal of Clinical Psychology* 63(10): 979-999, 2007.

Sheth-Antonucci A, Gansler D, Tan D, Bhadelia R, Patz S, **Fulwiler C**: Orbitofrontal correlates of aggression in psychiatric patients. *Psychiatry Research: Neuroimaging* 147: 213-220, 2006.

Fulwiler, C, Eckstine J, Kalsy S: Impulsive-aggressive traits, serotonin function, and alcohol-enhanced aggression. *Journal of Clin Pharmacology* 45(1): 94-100, 2005.

Fulwiler C and Ruthazer R.: Premorbid risk factors for violence in mental illness, *Comprehensive Psychiatry* 40(2):96-100, 1999.

Fulwiler, C., Grossman, H., Cooper Forbes, C., Ruthazer, R.: Early-onset substance abuse and community violence by outpatients with chronic mental illness, *Psychiatric Services* 48:1181-1186, 1997.

Fulwiler, C., Forbes, C. Santangelo, S. and Folstein, M.F.: Self-mutilation and suicide attempt: Distinguishing features in prisoners, *Journal of the American Academy of Law and Psychiatry*, 25:69-77, 1997.

Fulwiler, C., Schmitt, E.A., Kim, J. and J.E. Dowling: Retinal patterning in the zebrafish mutant *cyclops*, *Journal of Comparative Neurology*, 381: 449-460, 1997.

Sajdel-Sulkowska, E., Chou, W.-G., Salim, M., Rehman, S., Majocha, R., **Fulwiler, C.**, Zain, S. and Marotta, C.: Genetic expression of amyloid and glial-specific protein in the Alzheimer brain. *Journal of the American Geriatric Society*, 36:558-564,1988.

Chou, W.-G., Majocha, R.E., Sajdel-Sulkowska, E.M., Benes, F.M., Salim, M., Stoler, M., **Fulwiler, C.E.**, Ventosa-Michelman, M., Rodenrys, A.M., Moore, K.E., Webb, T., Zain, S.B., and Marotta, C.A.: Immunologic and molecular genetic studies on amyloid deposition in the Alzheimer's disease brain. *Brain Dysfunction* 1:133-145, 1988.

Pope, H., Cole, J., Choras, P. and **Fulwiler, C.**: Apparent neuroleptic malignant syndrome with clozapine and lithium. *Journal of Nervous and Mental Disease*. 174:493-495, 1986

Fulwiler, C. and Saper, C.: Cholecystokinin-immunoreactive innervation of the ventromedial hypothalamus in the rat. *Neuroscience Letters* 53:289-296, 1985.

Fulwiler, C. and Saper, C.: Subnuclear organization of the efferent connections of the parabrachial nucleus in the rat. *Brain Research Reviews* 7:229-259, 1984.

Invited Articles and Chapters:

McMackin, R. and **Fulwiler, C.**: A public health-juvenile justice collaboration to address the psychiatric needs of incarcerated juveniles, *The Organizational Response to Social Problems* 8:335-361, 2001.

Fulwiler, C.: Release planning for inmates with mental illness, *Correctional Health Care Report*, March/April 2000.

Fulwiler, C. and M.F. Folstein: Commentary on Chris Walker's Interpretation of Karl Jaspers' Phenomenology: A Critique. *Philosophy, Psychiatry and Psychology*, 2(4), 345-346, 1995

Fulwiler, C., Grossman, H., Cooper Forbes, C., Ruthazer, R.: Early-onset substance abuse and community violence by outpatients with chronic mental illness, in *Violent Behavior & Mental Illness*, pp.64-68. American Psychiatric Association, Psychiatric Services Research Center, Washington, DC, 1997.

Fulwiler, C. and W. Gilbert: Zebrafish embryology and neural development. (Review) *Current Opinions in Cell Biology*, 3:988-991, 1991.

Fulwiler, C. and Pope, H.: Depression in personality disorder, in *Presentations of Depression*, Oliver G. Cameron (ed.). John Wiley and Sons, New York, 1987.

Book Review:

The American Psychiatric Publishing Textbook of Substance Abuse Treatment, 4th edition, Psychiatric Services, 60:129, 2009

Doctoral Thesis:

Fulwiler, C.: Genetic Analysis of Retinal Development in Zebrafish, Harvard University, 1995.

Published Abstracts:

Iguchi L, Gansler DA, **Fulwiler C**, Van Dillen T, & Antonucci A (2006). Dorsolateral prefrontal cortex volume correlates with aggression and impulsivity. Abstracts of Division 40 Annual Meeting. *Clinical Neuropsychologist*, 20(3), 568-574.

Fulwiler, C., Benjamin, B., Scott, T., Bhadelia, R., Patz, S.: Preliminary morphometric study of amygdala volume in relation to impulsive-aggressive traits in psychiatric patients. *Biological Psychiatry* 53(supplement 8):90S-91S, 2003.

Fulwiler, C., Eckstine, J., Kalsy, S.: An exploratory study of serotonin function and personality traits in alcohol-enhanced aggression. *Biological Psychiatry* 49(supplement 8):87S, 2001.

McMackin, R. and **Fulwiler, C.:** A public health-juvenile justice collaboration to address the psychiatric needs of incarcerated juveniles, National GAINS Center Year 2000 National Conference, Miami, FL, April 2000.

Fulwiler, C., Gansler, D., Moczynski, N.P.: Neuropsychological characteristics of violent psychiatric patients. American and British Neuropsychiatric Associations, Cambridge, England, July 1997.

Grossman, H., **Fulwiler, C., Cooper-Forbes, C.** Characteristics of Homeless Referrals to an Assertive Community Treatment Team. Presented at the Annual Institute on Psychiatric Services, October 1995, Boston, MA.

Fulwiler, C., Yelick, P., & Gilbert, W.: *In Vivo* imaging of gene expression in zebrafish embryos: an insertional mutagenesis approach to neural development. Society for Neuroscience Abstr., 18:955, 1992.

Schmitt, E.A., **Fulwiler, C., Goodrich, L.V. and J.E. Dowling:** Eye morphogenesis in the zebrafish. *Soc. Neurosci. Abstr.* 17:9, 1991.

Fulwiler, C., Schmitt, E.A., and J.E. Dowling: Pattern regulation in the retina of the zebrafish mutant *cyclops*. Society for Neuroscience Abstr., 17:9, 1991.

Fulwiler, C., Schmitt, E., Dowling, J.E., and Gilbert, W.: Retinal development in the zebrafish: toward a genetic approach to development of the vertebrate visual system, in *Systems Approaches to Developmental Neurobiology*, Raymond, P.A., Easter, S.S. and Innocenti, G.M. (eds). Plenum Press, New York, 1990.

PRESENTATIONS

Jerram, M., Lee, J.K., Karpel, M., Fulwiler, C., Bhadelia, R., Gansler, D. Examining the Neural Correlates of the Color-Word Interference Test (CWIT) using Voxel-Based Morphometry. International Neuropsychological Society, Acapulco, Mexico, February, 2010

Lee, A., Jerram, M., Fulwiler, C., Gansler, D. Neural Correlates of Impulsivity Factors: A Voxel-Based Morphometry Study. International Neuropsychological Society, Acapulco, Mexico, February, 2010

Susmaras, T., Lee, A. K., Hardaway, R., Bhadelia, R. A., Fulwiler, C. Jerram, M., & Gansler, D. Using The Lifetime History of Aggression Revised Questionnaire & Voxel Based Morphometry to Investigate Neural Correlates of Aggression. International Neuropsychological Society, Acapulco, Mexico, February, 2010

Christopher, P., W. Fisher, C. Fulwiler, S. Hartwell, D. Smelson, D. Pinals. MISSION Diversion & Recovery for Traumatized Veterans (MISSION DIRECT-VET): Early Planning and Development. Poster Presentation for Psychiatry Research Day, University of Massachusetts Medical School, October 2009

Fulwiler C., N. Zhang, A. Lee, R. Hardaway, D. Gansler, M. Jerram, F. de Torrijos. A Pilot Study of Neural Correlates of Mindfulness and Anger Using fMRI. Poster Presentation for Psychiatry Research Day, University of Massachusetts Medical School, October 2009

Detoxification and Pharmacotherapy of Alcohol. Lecture. UMass Addiction Psychiatry Seminar Series, September 2009

Fulwiler, C., Biebel, K., Phillips, S., Smith, L., Smith, K., Ziedonis, D. (June, 2009) Mental Health Agency Research Network (MHARN): Developing a statewide network for knowledge sharing, technical assistance and collaborative research. 25th Annual Public Sector Psychiatry Conference: Health & Wellness for Persons with Serious Mental Illness: Challenges & Opportunities, June, 2009.

Fulwiler, C., Biebel, K., Phillips, S., Smith, L., Smith, K., Ziedonis, D.: The Mental Health Agency Research Network (MHARN): Developing a statewide network for knowledge sharing, technical assistance & collaborative research. 3rd Commonwealth Medicine Academic Conference, April, 2009.

Fulwiler, C. Dissemination of CMHSR Research. DMH Centers for Excellence Annual Presentation, Boston, MA. March 16, 2009.

Mental Health Services for People with Mental Illness in the Criminal Justice System, UMass Medical School Law & Psychiatry Program Seminar. December, 2008

Gonzalez, G., Romero-Gonzalez, M., Patwa, H., Tokuno, H., Petrakis, I., Masry, A., Fulwiler, C., Ziedonis, D. Myoclonus Cases Associated with Tiagabine Treatment for Cocaine and Opioid Dependent Patients. American Academy of Addiction Psychiatry Annual Meeting December, 2008

Fulwiler, C., Biebel, K., Phillips, S., Smith, L., Ziedonis, D. Mental Health Agency Research Network (MHARN): Developing a statewide network for knowledge sharing, technical assistance and collaborative research. Poster Presented – UMMS Psychiatry Research Day. October 2008.

Fulwiler, C., Biebel, K., Phillips, S., Smith, L., Smith, K., Ziedonis, D. (June, 2009) Mental Health Agency Research Network (MHARN). National Alliance for Mental Illness, 26th Annual Convention, Danvers, MA. October, 2008

Substance Abuse and Criminal Justice Involvement in People with Mental Illness. Interviewed for Ask the Doctor series by NAMI Medical Director, Oct. 31, 2008.

American Society of Addiction Medicine New England Chapters Annual meeting, Pharmaceutical Opiate Abuse/Dependence: The impact Pharmaceutical Opiate Problems are having on the Addiction Field (Discussant), September 6, 2008.

Emerton, B.C., Jerram, M., Fulwiler, C., Gansler, D.A. A VBM based exploration of MRI acquisition protocol variance. Annual meeting of the American Academy of Clinical Neuropsychology, Boston, MA, June 2008.

Moore, D.W., Gansler, D.A., Fulwiler, C., Rood, K., Billings, R.L., Hogan, E., Heilman, K.M. Understanding creativity and its neural bases. American Academy of Clinical Neuropsychology, June 2008.

Chisholm, C., St.Clair, J., Allgair, A., McLaughlin, N., Moore, D.W., Jerram, J., Fulwiler, C., & Gansler, D.A. Differing contributions of the OFC to aggression and impulsivity. Association for Behavior and Cognitive Therapy, January 2008

Violence and Serious Mental Illness, Beth Israel Deaconess Medical Center. December 11, 2007

Risk Management in the Treatment of Addictions, Massachusetts Psychiatric Society Annual Risk Management Update, Waltham, MA. April 1, 2006

Update on the Treatment of Alcoholism. Grand Rounds, Shattuck Hospital, December 6, 2005

Update on the Treatment of Alcoholism. Grand Rounds, Marlboro Hospital, Marlboro, MA. October 6, 2005

Pharmacotherapies for Addiction, UMass Memorial Medical Center. May 27, 2005

The Difficult Patient, Grand Rounds, Shattuck Hospital, Boston, MA. April 26, 2005

Risk Management in the Treatment of Addictions, Massachusetts Psychiatric Society Annual Risk Management Update, Waltham, MA. April 9, 2005

Criminal Justice Diversion for People with Mental Illness: Overview and experience from the FACS Program in Boston, Correctional Association of Massachusetts, Milford, MA. October 26, 2004

Mental Health Services for Ex-Offenders, Inside and Out: HIV & Corrections Conference 2004, Plymouth, MA. October 20, 2004

Recidivism in an Outpatient Program for Offenders and Ex-Offenders, GAINS Center National Conference, San Francisco, CA. October 30, 2002

The Biology of Violence: Overview and Recent Results, Science Lecture Series, Dept. Psychiatry, New England Medical Center. September 9, 2002

Mental Illness and Criminal Justice: Intersections and Interventions, Dept of Family Medicine & Community Health, Tufts University School of Medicine. October 18, 2001

Forensic Access to Community Services, Jail Diversion Workshop, Annual Meeting of Massachusetts Alliance for the Mentally Ill, Leominster, MA. May 12, 2001

Substance Abuse and Chronic Opioids, Pain Medicine Lecture Series, New England Medical Center. April 11, 2001

A Public Health Approach to the Mental Health Needs of Incarcerated Juveniles (Panelist)
Community Interest and Private Need in Public Mental Healthcare 128th Annual Meeting of American Public Health Association, Boston MA. November 14, 2000

Violence: Causes, Prevention and Treatment, First Monday 2000: United to End Gun Violence, Graduate Programs in Public Health, Tufts University School of Medicine. October 4, 2000

Alcohol's Effect on Aggression, Science Lecture Series, Dept. Psychiatry, New England Medical Center. September 25, 2000

Effective Treatment Matching: Applying research in the real world, Substance Abuse Treatment and the Criminal Justice System, National Assn. of Social Workers conference. Boston, MA. September 18, 2000

Substance Abuse in the Elderly, 3rd Annual Geropsychiatric Conference, Norwood-Caritas Hospital, Norwood, MA. September 18, 2000

Anger, Drugs and Violence: What's the Connection?, Science Lecture Series, Dept. Psychiatry, New England Medical Center. May 10, 1999

Psychoactive Substance Use and Violence, Tewksbury Hospital. April 15, 1999

Segregation of Inmates with Major Mental Illness, Massachusetts Dept. of Mental Health Forensic Mental Health Leadership Forum, Worcester State Hospital, Worcester, MA. September 17, 1998

Major Mental Illness In Prisons: Implications of segregation and isolation, National Association of Social Workers Criminal Justice Committee, Boston. June 11, 1998

Mental Illness and Violence, Behavioral Neurology Seminar, Brigham & Women's Hospital. December 11, 1997

Understanding and Managing the Violent Patient, Grand Rounds, Shattuck Hospital. June 8, 1996