- 1. I am a medical doctor specializing in neurology in Huntington, New York. I operate a private neurological practice. I am recognized as a neurology expert. I trained under Fred Plum, M.D., who originally popularized the term "vegetative state." I am also an Assistant Professor of Neurology at the New York Medical College.
- 2. I am Board Certified in Neurology by the American Board of Psychiatry and Neurology.
 I am a Diplomate of the American Board of Psychiatry and Neurology. I am also a Fellow of the American Academy of Neurology. I am hoensed to practice Medicine and Surgery in the state of New York. I am the Founder and President of the Neuro-Degenerative Disease Foundation.
- 3. Although I have not physically examined Theresa Marie Schiavo, nor have I read her medical records. I base my opinions about her condition on extended experience and knowledge working with patients in similar conditions, including the Central Park jugger case in Manhattan in 1989.
- 4. Based on my opinion, and limited knowledge regarding her case, I believe that there is a definite possibility that Ms. Schiavo is not in a persistent vegetative state because the television show that I watched, she seems to be consciously aware. I think she is minimally conscious at least. She may even be conscious.
- 5. A persistent vegetative state is when a patient's reflexes take over. A minimally conscious state is more than reflexive. Based on my knowledge of Ms. Schiavo, it is clear that she is more than reflexive, therefore I believe she is at least minimally conscious.
- Ms. Schiavo needs to be evaluated in order to determine her level of cognitive functioning. A PET scan or an FMRI (functional MRI), and an EEG would be helpful.

7. Therapy makes a difference. Holding back therapy from a sick patient can make that
patient go backwards. Ms. Schiavo needs therapy. Any therapy will be helpful including
swallowing, physical, etc.
8. In regards to swallowing therapy, I have been informed that Ms. Schiavo is capable of
swallowing to some extent, including her saliva. With swallowing therapy Ms. Schiavo can
slowly be trained and then the feeding tube can be removed. I recommend that a swallowing
specialist or consultant see and examine Ms. Schiavo.
9. Also a measure of Ms. Schiavo's autonomic parameters, such as pulse and blood pressure
changes with certain stimuli, should be taken and that would show awareness.
10. I would also recommend a measurement of her spontaneous movements, as well as
testing her response to deep pain, which can show function. An evaluation should be done
periodically because life itself is a process.
11. Ms. Schiavo also definitely needs speech therapy. Language preservation shows higher
cortical function in and of itself. There are many levels to speech and this shows brain function
and overall awareness.
12. A Neuro-opthomologist, an eye doctor sub-trained in neurology, should also examine Ms.
Schiavo.
13. I make myself available to examine and to consult Ms. Schiavo and evaluate the level of
her higher cortical function and determine what treatments should be given next.
I declare under the penalty of perjury under the laws of the State of New York that the

Huntington, New York.

Beatrice C. Engstrand, M.D., Declarant

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CURRICULUM VITAE

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HOSPITAL AFFILIATES:

Huntington Hospital

Glen Cove Hospital

North Shore University Hospital, Manhasset, N.Y.

New York Medical College, St. Vincent's Hospital and Medical Center of New York

Westchester County Medical Center

PRESENT POSITIONS:

Private Neurological Practice, October, 1992—Current

Assistant Professor of Neurology, New York Medical

College

Founder and President, Neuro-Degenerative Disease

Foundation

Advisory Council to Arts and Science, Lehigh University Women's Study Advisory Board, Lehigh University The Legislative Committee of the Suffolk County

Medical Society

FORMER POSITION:

Attending Neurologist, Metropolitan Hospital New York City, July, 1988—September, 1992

LICENSED:

New York State-Medicine and Surgery

Diplomate of the American Board of Psychiatry and

Neurology

Board Certified in Neurology by the American Board of

Psychiatry and Neurology, Inc.

AWARDS AND HONORS:

Diplomate & Fellow American Academy of Neurology

Woman of The Year-Distinction Magazine 2003

Outstanding Young Women of America, 1997

Whos Who--Leading Professionals & Executives 1996

Soroptimist International of the Americas-Woman of Distinction Award

Regional and National White House Fellowship Finalist, 1992-93

Honorary Doctorate, Lehigh University, Oct., 1991

Paul Harris Fellow, 1991

Berner High School Hall of Fame, 1987

Leopoldo Canales Award, Excellence In Neurology 10/84

The Bentrice Sterling Hollander, M.D., W.M.C. 1941 Memorial For Promise of Leadership, High Character, and Creativeness in My Profession, May, 1984

International Who's Who of Professionals, Year 2000

Who's Who In America—Year 2000

Young Physician, New York State Representative

FOREIGN LANGUAGES:

Write, read, speak Spanish and Italian

EDUCATION:

Neurology Resident, SUNY Health Science Center, Brooklyn, Downstate/Kings County Medical Center, July, 1986—June, 1988

The National Hospital, Queens Square, London, England—May, 1988 Movement Disorder with Professor Q. David Marsden

Neurology Resident

The New York Hospital/Cornell Medical

Center, New York, July, 1985-June, 1986

Resident, Medicine 1 North Shore University Hospital, Manhasset, New York

The Medical College of Pennsylvania, Graduation-June, 1984 Humanitarian Scholar and M.D.

Lehigh University, B.A.—October, 1982 Alfred G. Berner High School Graduation—June, 1978 (Valedictorian—Class of 700)

BOOKS AND PUBLICATIONS: A Gift of Healing-A Legacy of Hope, June, 1990, Wynwood Press

A May, 1984 article in the Lehigh Alumni Magazine, A Gift of Healing Painfully Earned
"Cocaine—Related Ischemic Strokes," Neurology, 1989
(Suppl.):s 186, Engstrand, BC, Daras M, Tuckman
AJ, Koppel B.S., Schallop C, and Jindal SP

"Recurrent Scizures with Cocaine Abuse," presented at the American College of Physicians in New York, 1990, Harden C., M.D., Daras M., M.D., Engstrand B., M.D., Tuchman AJ, M.D.

"Lumbar Puncture In Aids Patients with CNS Toxoplasnosis," presented at the American College of Physicians in New York, 1990, Daras M., M.D., Tuckman AJ, M.D., Engstrand B, M.D.

Featured writer for the Internal Journal and for the Alumnea Magazine, MCP Today--1980-1984.

Editor of High School paper-1977-78.

LECTURES:

Courage of the Mind, Body and Spirit, June 5, 1998,
Canyon Ranch
Creative Healing: People Who Beat The Odds And You
Can Too, June 6, 1998, Canyon Ranch
Lectured Canyon Ranch Medical Staff on Dementia,
June 6, 1998
Central Presbyterian Church, Park Avenue, N.Y., N.Y.
Lectured for the Huntington Hospital Diabetes Education
Series on Neuropathy, May 15, 2003
Featured Speaker for the Epilepsy Foundation of Long
Island at their Annual Conference, November, 2003

MEMBERSHIPS:

AMA, AMSA, ACP, American Academy of Neurology, Brooklyn Neurological Society, Medical Society of the State Of New York, Alumnae Association of MCP, Cornell University, and Lehigh University, Diplomate of the National Board of Medical Examiners, Bioethics Committee of the Westchester County Medical Center, New York County Medical Society (P.R. Subcommittee), member of the Committee for ALS, The Women's Studies Advisory Board of Lehigh University and The Legislative Committee of the Suffolk County Medical Society.

OFFICES HELD:

President, Upper Manhattan Rotary
Board member ALS (Amyotrophic Lateral Sclerosis), and
Board of Veritas, 1991
Chaired Bioethics' Subcommittee, Metropolitan Hospital
Former member of the Medical Board at
Metropolitan Hospital

PUBLIC RELATIONS:

C.B.S. This Morning, N.B.C. News, Cable News
Joe Franklin Show, W.E.V.D., Ruth Jacobs Jewish Home
Show, W.F.T.R., Wisconsin, W.F.I.R., Virginia,
W.C.C.O., Minnesota, W.F.D.V. Human Medicine,
People Magazine, Cindy Adams' New York Post
column and the July, 1995 issue of Reader's Digest
article, The White Sneakers
Featured Speaker—American Running and Fitness
Association, November 11, 1995, New York
Sheraton, Marathon Medical Seminar.

INTERESTS:

Opera (Former Patron of the Metropolitan Opera),

Creative writing, public speaking, performing arts, foreign

languages, animal behavior studies, travel, walking, swimming, boating, politics, antiques and interior

decorating.

WOR RADIO SHOW:

Creator, Director and Host of the WOR 710 AM Radio

talk show, Neurology with Dr. Engstrand each

Sunday night from 10:30-11PM.

WLIE RADIO SHOW:

Creator, Director and Host of the WLIE 540AM radio

talk show, Evening Chats with Dr. Engstrand, every

Tuesday and Wednesday night 9:00-10 PM.