

## CURRICULUM VITAE

*Name:* Norman Jay Marcus, M.D., D.A.B.P.M.

*Address:* 30 East 40th Street, Suite 1100, New York, NY 10016

*Place of Birth:* New York, NY

### Education:

**1962** B.S. Queens College, Flushing, NY

**1967** M.D. State University of New York, Upstate Medical Center, Syracuse, NY

### Postdoctoral Training:

#### *Internship and Residencies:*

**1967-1968** Rotating Intern, Mt. Zion Hospital and Medical Center, San Francisco, CA

**1968-1969** Resident in Psychiatry, Albert Einstein College, Bronx State Hospital, Lincoln Hospital, Bronx, NY

**1969-1970** Resident in Psychiatry, Albert Einstein College of Medicine, Lincoln Hospital, Jacobi Hospital, Bronx, NY

**1970-1971** Chief Resident in Psychiatry, Albert Einstein College of Medicine, Bronx, NY

**1970** Director of Psychiatric In-Patient Ward, Bronx State Hospital, Bronx, NY

**1970-1971** Assistant Director of Psychiatric Day Hospital, Lincoln Hospital, Bronx, NY

**1968-1972** Participant in Family Therapy Training Program, Albert Einstein College of Medicine and Bronx State Hospital, Bronx, NY

#### *Fellowships:*

**1966** Summer Fellow, New York State Public Health Service, Survey of Medical Rehabilitation Program

**1972-1974** Fellow in Liaison and Psychosomatic Psychiatry, Liaison Psychiatrist in General Medicine and Oncology, Albert Einstein College of Medicine and Montefiore Hospital and Medical Center, Bronx, NY

#### *Tutorial:*

**1991-1996** The evaluation and treatment of muscle pain with Dr. Hans Kraus ten hours per week.

**Licensure and Certification:**

<b>1967</b>	California License
<b>1968</b>	New York License
<b>1974</b>	American Board of Psychiatry and Neurology
<b>1993</b>	America Board of Pain Medicine
<b>1997</b>	UK Medical License

**Current Academic Appointments:**

<b>1999-2017</b>	Clinical Associate Professor in Anesthesiology and Psychiatry, NYU School of Medicine, NY, NY
<b>2005- 2017</b>	Director, Division of Muscle Pain Research, Department of Anesthesiology, New York University School of Medicine, NY, NY
<b>2012-Present</b>	Associate Professor of Psychiatry, New York Medical College, Valhalla, NY
<b>2017-2021</b>	Adjunct Clinical Assistant Prof. of Pain Medicine in Anesthesiology and Neurological Surgery, Weill-Cornell Medicine, NY, NY
<b>2022-Present</b>	Clinical Associate Prof. of Pain Medicine in Anesthesiology and Neurological Surgery, Weill-Cornell Medicine, NY, NY

***Past Professional Appointments:***

<b>1970-1971</b>	Assistant Clinical Instructor in Psychiatry, Albert Einstein College of Medicine, Bronx, NY
<b>1971-1974</b>	Clinical Instructor in Psychiatry, Albert Einstein College of Medicine, Bronx, NY
<b>1977-1981</b>	Clinical Instructor in Social Medicine, Albert Einstein College of Medicine, Bronx, NY
<b>1977-1983</b>	Academic Affiliate: Assistant Professor of Psychiatry, Albert Einstein College of Medicine, Bronx, NY

***Hospital Appointments:***

<b>1974-1982</b>	Assistant Attending Psychiatry Montefiore Hospital
<b>1977-1983</b>	Assistant Attending Anesthesiology Montefiore Hospital
<b>1983-1988</b>	Assistant Attending Psychiatry Lenox Hill Hospital
<b>1988-</b>	Senior Attending Psychiatry Lenox Hill Hospital
<b>1988-</b>	Senior Attending Medicine Lenox Hill Hospital
<b>1983-1998</b>	Chief Pain Service, Medicine and Psychiatry, Lenox Hill Hospital
<b>1997-2000</b>	Consultant, Pain Medicine Princess Margaret Hospital, Windsor,UK
<b>2002-</b>	Attending Psychiatry/Pain Medicine, Tisch Hospital/NYU
<b>2002- 2015</b>	Attending NYU Pain Management Center
<b>2007-2010</b>	Attending Physician, Kaiser Permanente, San Diego, California

## **Professional Society Activities:**

### ***Major Committee Assignments:***

#### ***National and Regional:***

- 1994** AHCPD Reviewer for Acute Low Back Pain Guidelines  
**1998-2000** Scientific Advisory Committee American Medical Accrediting Program  
**2001-2015** AAPM representative to JCAHCO/AMA/AHRQ taskforce to establish performance measures for clinical assessment and treatment of low back pain, arthritis, and cancer pain  
**2007-2012** AAPM Co-Chair, Committee on External Affairs

## **Memberships, Offices and Committee Assignments in Professional Societies:**

***Professional Society Memberships:*** American Academy of Pain Medicine  
American Pain Society  
American Board of Pain Medicine  
International Association for the Study of Pain  
Eastern Pain Association  
American Medical Association  
Royal Society of Medicine  
Medical Society of State of New York

***Former Professional Society Memberships:*** American Psychosomatic Society  
Biofeedback Society of America

## **Professional Society Offices and Committee Assignments:**

### ***American Academy of Pain Medicine:***

- 1985-1989** Board of Directors – Director at Large – American Academy of Pain Medicine  
**1988-1990** Chairman Membership Committee  
**1989-2006** Chairman – Committee to Establish Uniform Outcome Criteria for Pain Centers in U.S.  
**1990-2006** Editorial Board: The Clinical Journal of Pain  
**1992** Scientific Program Chairman for annual scientific meeting, Scottsdale, AZ  
**1992-1995** Treasurer  
**1995-1996** Liaison to American Board of Pain Medicine  
**1998-1999** President Elect  
**1999-2000** President  
**2000-2001** Past-President  
**2000-2015** Liaison from AAPM to AMA/JCAHO consortium to establish performance measures for pain evaluation and treatment  
**2007-2012** Co-Chair, Committee on External Affairs

**2023-** Board of Directors- Representative of Council of Past Presidents

***Committee Memberships:***

**1999** By Laws and Long Range Planning  
Liaison to American Pain Society

***American Board of Pain Medicine (ABPM):***

**1992-1994** Member, Examination Council  
**1992-1995** Assistant Chairman Membership Committee (ABPM)  
**1994-1995** Vice President  
**2014-** Member, Board of Directors  
**2014-** Chair, Appeals Committee  
**2014-** Co-Chair Health Policy/Advocacy Task Force  
**2022-** Secretary/Treasurer

***American Pain Society (APS):***

**1991-1992** Chairman Sub-committee on Public Relations (APS)

***Eastern Pain Association:***

**1982-1983** Chairman, CME Credentials Committee, Eastern Pain Association  
**1983-1986** Scientific Program Chairman, Eastern Pain Society  
**1987, 1990** Chairman, Eastern Pain Association, John J. Bonica Lectureship Award Committee  
**1984-1988** Council Member Director at Large

***International Foundation for Pain Relief:***

**1994-2004** Founder and President

***Biofeedback Society of America:***

**1979-1980** President, New York State Biofeedback Society  
**1979-1982** Member, Ethics Committee of Biofeedback Society of America  
**1980-1982** Member, Committee for Accreditation, Biofeedback Society of America  
**1980-1982** Member, Standards Committee for Psychotherapy and Biofeedback Committee of Biofeedback Society of America

***Mental Illness Prevention Center, NYU School of Medicine***

**2003-2007** Chairman of Section on Pain and Mental Illness

**Other professional activities**

***Foundation for Research and Advocacy for Muscle Pain Education***

**2015-** President, Board of Directors

***Alvarez & Marsal***

**2014-2015** Member, Medical Advisory Board

*LiteCure*

**2011-** Member, Medical Advisory Board

**Scientific Awards:**

**1965** Gillette Scholarship  
**1966** Merck Manual Award

**Research:**

**1991- 2001** Chairman, Committee to Establish Uniform Outcome Measures for Pain Treatment Programs. Developed a standardized pain treatment assessment instrument.

**1992-1993** Pain consultant at Whitehall Laboratories for Robaxin treatment of back pain.

**1994** Glaxo Clinical Trial: Sumatriptan Suppos Phase III

**1998** Analgesic Drug Trials:

- The use of Dextromethorphan to reduce tolerance to opioids in chronic pain patients (Algos) Phase II.
- Naloxone for opiate induced constipation in chronic pain patients(UK and U.S.), (Roxane) Phase III.
- Oxycontin in the treatment of chronic low back pain. (U.K.) (Napp) Phase II

**2005-6** Bicifidine (DOV), Safety study for LBP

**1998-** Scientific Advisory Board American Pharmed Labs. Inc.

**2000-2005** Board of Directors- Life Sciences Inc., St Petersburg, Florida

**2003-2011** Vice-President of Living Data Technology - Oversee and Participate in the development of new applications of External Counter-pulsation in the treatment of diseases related to hypoxia.

**2006-2010** Sensory Evoked Potentials in patients with recurrent soft tissue pain.

**2007-2010** Kaiser Permanente Study to Determine if Muscle Pain Evaluation and Treatment Can Identify an Overlooked Muscular Source of Back and Leg Pain and Eliminate the Need for Scheduled Spine Surgery

**2008** Blinded Randomized Controlled Trial to compare Electrical Stimulation to Palpation to accurately identify painful muscles causing regional pain

**2008** Equivalency study for a Portable Electrical Stimulation Device with Sonic Palpometer (a device to identify pressure pain threshold)

**2010** Observational study with 16 month follow up study of patients who received soft tissue treatment after postinvasive treatments

- (surgery, epidural steroid injections, facet blocks, and/or trigger points)
- 2010** Randomized Controlled Trials of the use of topical ketamine to treat soft tissue pain.
- 2015-2016** Study of the use of Low Level Laser Therapy for patients diagnosed with Ehlers-Danlos Syndrome, Type III (Hypermobility)
- 2022** Survey of Clinicians in EDS Consortium on Education, Knowledge and Comfort in Diagnosing and Treating Soft Tissue Pain
- 2022** Observational Study of dose range of maximally effective dose of low dose naltrexone for chronic musculoskeletal pain

**Major Research Interests:**

1. Muscle Pain Evaluation and Treatment
2. Pain Treatment Outcomes Assessment and Evidence Based Medicine
3. Physical Examination Protocols
5. Diseases Related to Hypoxia

**Principal Clinical and Hospital Service Responsibilities:**

- 1975-1977** Staff Physician, Headache Unit, Montefiore Hospital
- 1977-1983** Co-founder and Co-director, Pain Treatment Center, Montefiore Hospital
- 1983-1998** Chief of Pain Service and Director of New York Pain Treatment Program, Lenox Hill Hospital
- 1997-2000** Director, Pain Treatment and Functional Restoration Centre, Princess Margaret Hospital, Windsor, UK

**Teaching Experience:**

- 1971** Psychiatry Lectures, First Year Residents, Lincoln Hospital/AECOM
- 1966** Survey of Medical Rehabilitation Program; New York State Public Health Service, Syracuse, NY
- 1971** Psychiatry lectures; First Year Residents, Lincoln Hospital, Bronx, NY
- 1972** Supervision; Drug Counselors, Methadone Maintenance Clinic, Lincoln Hospital, Bronx, NY
- 1972** Supervision; Second Year Residents, Liaison Psychiatry, Lincoln Hospital, Bronx, NY
- 1972-1974** Supervision: Interviewing Techniques and Psychodynamics; to medical students at Albert Einstein College of Medicine, Bronx, NY
- 1971-1974** Supervision: Family Therapy; Social Workers and Psychiatry Residents at Albert Einstein College of Medicine, Bronx, NY

- 1972-1974** Weekly Conference: The Psychological Aspects of Medical Illness; residents in Surgery and Medicine, Montefiore Medical Center, Bronx, NY
- 1972** Hypnosis and Relaxation Technique, Individual and Family Development; Medical and Pediatric Residents and Interns, Montefiore Medical Center, Bronx, NY
- 1974-1975** Interview Techniques and Enhancing Psychological Understanding of the Patient and his Symptoms and the Doctor's Reaction to his Patient; Physicians and Nurse Practitioners, Montefiore Medical Center, Bronx, NY
- 1974-1975** Supervision: Psychotherapy and Short Term Crisis Psychological Out-Patient Department Problems; Medical and Pediatric Attendings
- 1983-1998** Supervision of House-staff in Medicine and Psychiatry in the evaluation and treatment of acute and chronic pain, Lenox Hill Hospital
- 2002-2014** Supervision of residents and fellows in Anesthesiology in the evaluation and treatment of common pain syndromes, NYU Langone
- 2017-** Supervision and teaching of residents and fellows in Pain Medicine in the Departments of Anesthesiology and Neurosurgery in the evaluation and treatment of chronic pain, Weill Cornell Medicine

### **Lectures and Presentations:**

- Nov. 1972** A Comparative Review of Addiction Treatment in Two Different Communities; American Orthopsychiatric Convention, Galveston, TX
- Feb. 1974** Psychological Treatment of the Dying Patient; Seminar, Montefiore Hospital, Bronx, NY
- May 1974** Biofeedback and Self Control; Dept. of Psychiatry, White Plains Hospital, White Plains, NY
- Jan. 1977** The Understanding and Treatment of Headaches; Headache Symposium, Biofeedback Society of New York
- Feb. 1977** Biofeedback in Physical Rehabilitation; Dept. of Physical Rehabilitation, Albert Einstein College of Medicine
- Mar. 1978** Chairperson: Panel on Holistic Medicine; Annual Convention, Biofeedback Society of America, Albuquerque, NM
- 1979** Management of Chronic Pain; Basic Science Symposium
- June 1982** Anesthesiology & Critical Care Medicine, Montefiore Medical Center, New York, NY
- Mar. 1979** Biofeedback in Clinical Practice; CME Series, Westchester APA, New York, NY
- Mar. 1980** Psychological Aspects in the Treatment of Chronic Pain; Grand

**1980** Rounds, Neurology Department, Montefiore Medical Center  
 Psychological Aspects in the Treatment of Chronic Pain;  
 Psychiatry Department, Montefiore Medical Center  
**Mar. 1981** Somatopsychic and Psychological Approaches to Psychosomatic;  
 CME Series, Westchester APA  
**Oct. 1981** Psychological Aspects in the Treatment of Chronic Pain; Pain  
 Symposium, Englewood Hospital  
**June 1982** Psychological Aspects in the Treatment of Chronic Pain;  
 Psychiatric Grand Rounds, North Shore Hospital  
**Mar. 1983** Comprehensive Overview of the Mechanism and Treatment of  
 Acute and Chronic Pain; Medical-Surgical Grand Rounds, Lenox  
 Hill Hospital  
**Mar. 1985** State of the Art in the Treatment of Acute and Chronic Pain;  
 Consultation Liaison, Grand Rounds, New York Medical College  
**Nov. 1985** Somatopsychic Approaches to Functional Disease; Sloan-Kettering  
 Memorial Hospital  
**Apr. 1986** A Multidisciplinary Overview of Pain Management; William  
 Alanson White Institute  
**Apr. 1985** Predicting Pain and Discomfort in Crohn's Disease Following  
 Surgery; Inflammatory Bowel Disease Symposium, Lenox Hill  
 Hospital  
**Oct. 1986** Predicting Pain and Discomfort in Crohn's Disease Following  
 Surgery; American Pain Society Annual Convention – Poster  
**Nov. 1986** Evaluation and Treatment of Atypical Facial Pain; ENT Grand  
 Rounds, Lenox Hill Hospital  
**Feb. 1987** Current Concepts in Evaluation and Treatment of Pain; New York  
 Association of Physical Therapists  
**Nov. 1987** Evaluation and Treatment of Chronic Pelvic Pain without  
 Pathology; OB/GYN Grand Rounds, Lenox Hill Hospital  
**Dec. 1987** Evaluation of Acute and Chronic Pain in the Injured Worker;  
 Human Resources Center, Albertson, LI  
**Dec. 1987** Pain and Disability and Its Treatment; N.Y. State Worker's  
 Compensation Board Physicians  
**Dec. 1987** The Understanding and Treatment of Chronic Pain; St. Vincent's  
 Hospital, Psychiatry Department  
**Mar. 1988** Pain, Impairment and Disability; Medical Directors, Citicorp  
**Apr. 1988** Chronic Pain and Disability; Washington Business Group  
**May 1988** Pain and Disability – the Need for Early Intervention; Cost-  
 Containment Analysts, Citicorp  
**June 1988** Pain, Impairment and Disability; N.Y. State Society of Internal  
 Medicine  
**Sep. 1988** Chronic Pain and Disability; Women in Insurance, New York, NY  
**Oct. 1988** Poster Presentation: Reduction of Pain in Surgical Patients pr- and  
 Post-op; American Pain Society, Annual Convention  
**May 1989** Treatment of Chronic Pain; Coler Memorial Hospital, Physical



- Medicine Department
- June 1989** Current Concepts in Pain Management; Lenox Hill Hospital, Department of Neurology
- Mar. 1990** Treatment of Post-Operative Pain; Lenox Hill Hospital, Department of Surgery Grand Rounds
- Apr. 1990** Post-Operative Pain Management; Lenox Hill Hospital, Department of Surgery
- May 1990** Perspective in the Treatment of Acute and Chronic Pain; Lenox Hill Hospital, Combined Medical Surgical Conference
- Sep. 1990** Management of Post-operative Pain; Lenox Hill Hospital, Department of Surgery Grand Rounds
- Oct. 1990** The Management of Acute Pain; Lenox Hill Hospital, Medical Lecture Series
- Oct. 1990** Management of Chronic Pain; Lenox Hill Hospital, Medical Lecture Series
- Nov. 1990** Acute Versus Chronic Pain: Concepts and Management Approaches of Pain Medicine; Frontiers of Medicine Lecture Series, sponsored by The American Academy, Woodbury, NY
- 1991** Pharmacological Management of Chronic Pain; American Academy of Pain Annual Conference
- Jan. 1991** Treatment of Acute and Chronic Pain; ICD Psychiatry Staff
- Jan. 1991** Management of Pain in the Hospital Setting; St. John's Episcopal Hospital combined Grand Rounds, Department of Psychiatry and Medicine
- Mar. 1991** New Developments in Pain Treatment; United Nations Staff
- Apr. 1991** Management of Acute & Chronic Pain; St. Michael's Hospital, Newark, NJ Grand Rounds, Department of Medicine
- Sep. 1991** Cognitive Behavioral Approaches – The Injured Worker's Perspective; American Academy of Pain Medicine, New Jersey
- Oct. 1991** The Injured Worker's Perspective; Professional Nurses' Rehab Association, New Hyde Park, NY
- Oct. 1991** Cause and Treatment of Headaches; Personnel Health Service, Philip Morris, New York, NY
- Oct. 1991** Management of the Patient with Chronic Pain: A Comprehensive Overview; New York Claim Association Continuing Education, Eisenhower Park, NY
- Dec. 1991** Low Back Pain and Disability; Aetna Insurance, Mineola, NY
- Feb. 1992** Reflex Sympathetic Dystrophy; General Rehabilitation Services, Inc., Bohemia, NY
- Mar. 1992** Reflex Sympathetic Dystrophy and Post Laminectomy Syndrome; Cabrini Hospital, Department of Orthopedics
- Apr. 1992** Reflex Sympathetic Dystrophy; Lenox Hill Hospital, Department of Physical Therapy
- June 1992** Stress and Chronic Pain in the Workplace; Young Presidents Organization, New York, NY
- Sep. 1992** Cognitive Behavioral Aspects in Pain Treatment in Dystonia

**Sep. 1992** Patients; Dystonia Foundation, New York, NY  
 Presentation on Protocol for Evaluation and Treatment of Acute Low Back Pain; Department of Health and Human Services, Washington DC, Public Meetings on Establishment of Treatment Recommendations for Acute Low Back Pain

**Oct. 1992** Reflex Sympathetic Dystrophy Etiology and Treatment; General Rehabilitation Services Inc., Hauppauge, NY

**Nov. 1992** Treatment of Acute and Chronic Pain in the Upper Extremity; St. Vincent's Hospital, New York, NY

**Nov. 1992** Reflex Sympathetic Dystrophy Etiology and Treatment; General Rehabilitation Services, Inc., New York, NY

**Dec. 1992** Reflex Sympathetic Dystrophy Etiology and Treatment; General Accident Insurance, Melville, NY

**Jan. 1993**

1. Acute and Chronic Pain Differences in Characteristics and Treatment;
2. Cognitive Behavioral Approaches to the Management of Chronic Pain of Non-Malignant Origin;
3. Comprehensive Management of Stress and Chronic Pain in the Workplace; Guest Lecturer, Vanderbilt Pain Symposium, St. Maarten, West Indies

**Feb. 1993** Reflex Sympathetic Dystrophy Etiology and Treatment; Insurance Women in Claims, Jericho, NY

**Apr. 1993** Cause and Treatment of Back Pain; Continental Rehab. Resources, Piscataway, NJ

**June 1993** Prevention of Catastrophic Claims for Reflex Sympathetic Dystrophy; Insurance Women in Claims, Jericho, NY

**July 1993** Critical Overview of Concepts of Acute and Chronic Pain; Brooklyn Dept. of Veterans Affairs Medical Center

**Dec. 1993** Comprehensive Management of Cancer Pain; Mt. Sinai Department of Oncology Grand Rounds

**Dec. 1993** Myofascial Pain Treatment in a Comprehensive Pain Treatment Program; Mt. Sinai Hospital, First International Symposium on Myofascial Pain

**Jan. 1994** Mechanisms and Treatment of Post-operative Pain; Lenox Hill Hospital, Department of Surgery Grand Rounds

**Feb. 1994** Comprehensive Management of Low Back Pain; New York Hospital Physiatry and Physical Therapy

**Apr. 1994** Epidemic of Back Pain in Western Industrialized Countries; Guest Lecturer, Wisconsin Medical Association

**May 1994** Treatment of Back Pain from a Muscle Perspective; Lenox Hill Hospital, Physical Therapy Department

**Aug. 1994** Acute and Chronic Pain Treatments; Lenox Hill Hospital, Medical Internship Lectures

**Nov. 1994** Reflex Sympathetic Dystrophy Syndrome; International Center for the Disabled

**Dec. 1994** The Second International Course and Workshop on Myofascial

- Pain: "Myofascial Pain Treatment in a Pain Center"; Mt. Sinai Medical Center, New York, NY
- Oct. 1995** The Absence of the Evaluation and Treatment of Muscle Pain Impacts on the Efficacy of Pain Treatment Strategies; Visiting Professor, Stanford University, Pain Management Center
- Oct. 1995** The Management of Chronic Pain: Keeping Employees at Work; Washington Business Group on Health
- Nov. 1995** Pain Symposium: Comprehensive Methods of Pain Management; New York State Department of Social Services Office of Disability Determinations, New York University Medical Center
- Nov. 1995** Evaluation and Treatment of Police Officers Presenting with Low Back and Myofascial Pain; NYC Police Department, Police Surgeons, Corona, NY
- Dec. 1995** Current Concepts in Acute, Chronic, and Cancer Pain; World Foundation for Pain Relief and Research
- Mar. 1996** Current Approaches to Chronic Pain; Union Carbide Corp. Medical Department
- Apr. 1996** New Approach to Evaluating and Treating Back Pain; Greater New York Association of Occupational Health Nurses
- Aug. 1996** Pain Management in Inflammatory Bowel Disease; Crohn's and Colitis Foundation of America, Inc.
- Aug. 1996** Management of Ophthalmic Post Herpetic Neuralgia – The Pain Specialist's Perspective; Manhattan Eye, Ear and Throat Hospital, Department of Ophthalmology
- Sep. 1996** Multidisciplinary Pain Treatment Programs; Princess Margaret Hospital, Windsor, England
- Sep. 1996** Multidisciplinary Pain Treatment Programs; St. Peters Hospital, Churtsey, England
- Sep. 1996** Containing the Drivers of Disability in the Workplace; Benefits Management Forum and Expo. New Orleans, LA
- Oct. 1996** Establishing a Standardized Physical Examination to Aide in the Evaluation of Treatment Outcomes; The Health Insurance Association of America of Washington, DC, Disability Committee
- May 1997** Outcome Measures for Pain Centers; Southern Pain Society Annual Scientific Conference in New Orleans, Keynote Speech
- May 1997** Enhancement of Return to Work Potential through Proper Evaluation and Treatment of Muscles: Review of Utilization of MRIs, Epidural Steroids and Diagnosis and Treatment of RSD; CNA Insurance Company, Rehabilitation Nurses, Melville, NY
- June 1997** Back Pain, RSD and High Technology Interventions in Injured Workers; CNA Insurance Company, Rehabilitation Nurses, New York, NY
- June 1997** Introduction of a Novel Collaboration amongst Physicians, Insurance Carriers, Employers and Injured Workers to Facilitate Rapid Return to Work; CNA Insurance Company, Field Agents

- Aug. 1997** Acute Pain and Chronic Pain Orientation Lectures for House Staff in Internal Medicine; Lenox Hill Hospital
- Sep. 1997** Complex Regional Pain Syndrome and Reflex Sympathetic Dystrophy; Lenox Hill Hospital, Department of Neurology Grand Rounds
- Sep. 1997** Comprehensive Overview of Evaluation and Treatment of Acute and Chronic Pain in the U.S. and U.K.; Princess Margaret Hospital, Windsor, England, General Practitioner
- Dec. 1997** Uniform Outcome Measurement for Pain Treatment and Myofascial Pain Syndrome Diagnosis and Treatment; The World Foundation for Pain Relief and Research, New York, NY
- May 1998** Selection Criteria and Outcome Measurements for Pain Treatment Facilities; Hudson Valley Pain Society, Helen Hayes Hospital, Haverstraw, NY
- Nov. 1998** Combined Pain Rounds – Controversies in the Assessment and Treatment of Acute and Chronic Pain; New York University Medical Center – Hospital of Joint Disease, New York, NY
- Nov. 1998** Treatment of Acute and Chronic Pain in the Emergency Room; Lenox Hill Hospital, Emergency Room Physicians and House Staff, New York, NY
- Nov. 1998** The Role of Muscle in Chronic Pain; Beth Israel Medical Center, The Department of Pain Medicine and Palliative Care Case Conference, New York, NY
- Aug. 1999** The Evaluation and Treatment of Acute Pain States, House-staff Orientation Lecture Series, Lenox Hill Hospital
- Aug. 1999** Evaluation and Treatment of Chronic Pain States, House-staff Orientation Lecture Series, Lenox Hill Hospital
- Sept. 1999** Evaluation and Treatment of Myofascial Pain and Fibromyalgia, American Pain Society Regional Lecture Series
- Sept. 1999** Treatment of Pain in the Emergency Room, Lenox Hill Hospital House-staff
- Oct. 1999** Treatment of Pain in the ICU, Lenox Hill Hospital House staff
- Oct. 1999** Evaluation and Treatment of RSD and Diabetic Neuropathy, Connecticut Podiatry Association
- Feb. 2000** Myofascial Pain Syndromes, Plenary Lecture, Am Ac of Pain Medicine Annual Review Course, New Orleans, La.
- Feb. 2000** A muscle evaluation and treatment algorithm appears to increase successful treatment outcome in chronic pain patients, Lecture at Am Ac of Pain Medicine annual convention, New Orleans, La.
- May 2000** Treatment of Cancer Pain, Surgical Grand Rounds, Phelps Memorial Hospital, Tarrytown, NY
- May 2000** Treatment of Cancer Pain, Medical Grand Rounds, Clara Maas Hospital, Belleville, NJ
- Sept. 2000** Pain Treatment in the ICU, ICU Grand Rounds, Lenox Hill Hospital

- Oct. 2000** Diagnosis of Myofascial Pain. in Advances in the Treatment of Neuromuscular Pain Ed. Staats, P., CME Monograph, John Hopkins' Office of CME
- Dec. 2000** Assessment and Treatment of Acute and Chronic Pain, Medical/Surgical Grand Rounds, Lenox Hill Hospital
- Apr. 2001** Pain Treatment in Opioid Addicts. Montefiore Conference on the Treatment of Chronic Illness, Montefiore Hospital
- May 2001** Treatment of Acute and Chronic Pain. St. Mary's Hospital Hackensack, NJ
- Jun. 2001** Treatment of Acute and Chronic Pain. Helen Hayes Hospital, Stony Point, NY
- Sept. 2001** Treatment of Acute Pain. Lenox Hill Hospital Medicine House Staff Lecture
- Sept. 2001** Treatment of Chronic Pain. Lenox Hill Hospital Medicine House Staff Lecture
- Apr. 2002** Treatment of Acute and Chronic Pain. NYU Psychiatric Center, White Plains, NY
- May 2002** Treatment of Acute and Chronic Pain. Rockland State Hospital, Orangeburg, NY
- Aug. 2003** Myofascial Pain: Pathophysiology, Evaluation, Diagnosis and Treatment. NYU School of Medicine Pain Management Lecture
- Sept. 2003** Identification and Treatment of Trigger Points. NYU Medical Center, Department of Anesthesia Pain Lecture and Workshop
- Oct. 2003** Treatment of Acute and Chronic Pain. Westchester County Medical Center, Dept. of Neurology
- June 2004** Pain Treatment in Patients Addicted to Opioids, New York City Council on Alcoholism and Addiction
- June 2004** Muscle Pain in Medical Practice, Fourth Year Medical Students NYU School of Medicine
- Nov. 2004** NYU Pain Symposium: Myofascial Pain Lecture; Muscle Pain Workshop, NYU School of Medicine
- Oct 2005** Pain Treatment in Medical Practice, Fourth Year Medical Students NYU School of Medicine
- Nov 2005** NYU Pain Symposium: Fibromyalgia, Muscle Injection Techniques Demonstration and Lecture
- Feb 2006** AAPM Annual Scientific Meeting, SD, Ca  
Evidence-based Evaluation and Treatment of Muscle Pain (Symposium with Prof. Siegfried Mense)
- Nov 2006** NYU Pain Symposium, Muscle Injection Techniques Demonstration and Lecture
- Dec 2006** Pain Treatment in Medical Practice, Fourth Year Medical Students NYU School of Medicine
- Nov 2007** NYU Pain Symposium: Moderate Lectures on Pain and Addiction; Muscle Injection Practicum
- Dec 2007** Pain Treatment in Medical Practice, Fourth Year Medical Students NYU School of Medicine

- Dec 2008** Moderator, Evidence-based, Non traditional Approaches to the Treatment of Back Pain; Muscular Causes and Treatment of Low Back Pain; Presentation at NYS Post Graduate Anesthesia/AAPM Meeting
- Oct 2009** Evaluation and treatment of Low Back and Neck Pain; Sheikh Kalifah/Cleveland Clinic Hospital, Abu Dhabi
- May 2010** Stress and Pain; NYU Dept of Psychiatry State Grand Rounds
- Nov 2010** Pain and Disability: Low Back and Neck Pain; World Conference of Disability, Dallas, TX
- Aug 2011** Muscles and Pain, the overlooked organ system; Visiting professor, Lecture, demonstration and discussion with faculty, students and interns, New England University, College of Osteopathic Medicine, Kennebunkport, Maine
- Nov 2013** Pain and Analgesics; Lecture for Defense Association of New York, New York, NY
- Jan 2014** Muscles (and Pain); PM&R Grand Rounds, NYU Langone Medical Center, New York, NY
- Jan 2014** Muscles (and Pain); Cadaver Injection Workshop; PM&R Residents at NYU Langone Medical Center, New York, NY
- June 2014** Muscles and Pain, the Ignored Organ System; Rheumatology, NYU Langone Medical Center, New York, NY
- Oct 2014** Muscles and Pain: Pathophysiological Mechanisms; Lecture at Rheumatology Fellow Conference, NYU Langone Medical Center/VA, New York, NY
- Dec 2014** Muscles: The Ignored Organ System, Lecture at NYU/Langone/Thomas Blanck's research lab staff and fellows, New York, NY
- May 2015** CRPS/RSD: A Popular Diagnosis. Is it Plausible?, Lecture at Travelers Insurance Counsel, New York, NY
- July 2015** Pain Fellows Conference, University of Miami, Department of Anesthesiology, Miami, FL
- April 2016** EDS & Pain, Lecture at NYC Branch of EDS Support Group, New York, NY
- June 2016** A Soft Tissue Paradigm Can Improve Pain Treatment Outcomes, Multi-disciplinary Spine Series, Weill-Cornell CME Lecture Series, New York, NY
- July 2016** A Soft Tissue Paradigm Can Improve Pain Treatment Outcomes, Anesthesiology Grand Rounds, Advocate Medical Center, Chicago, IL
- July 2016** Visiting Professor for 3 days, Advocate Medical Center, Anesthesiology/Pain Medicine, Chicago, IL
- July 2016** Poster Presentation: Case report and follow-up observational study: Promising new treatment of pain in patients with Ehlers-Danlos hypermobility type (EDSIII), Ehlers-Danlos Symposium, New York, NY
- Oct 2016** Pathophysiology and Treatment of Common Soft Tissue Pain, Pain Fellows, Dept of Anesthesiology, Weill-Cornell, New York, NY

<b>Oct 2016</b>	Spine-Related Chronic Pain and Muscles (The overlooked organ system), Grand Rounds, Dept of Neurosurgery, Weill-Cornell, New York, NY
<b>Mar 2017</b>	Poster Presentation: Chronic Pain, Subjective Stiffness, and Hypermobility-Consider Ehlers-Danlos Syndrome, AAPM Annual Meeting, Orlando, FL
<b>Dec 2017</b>	EDS: Understanding your pain and how to treat it, EDS Symposium, NYIT, New York, NY
<b>Oct 2018</b>	Muscles and Pain: Improving Treatment Outcomes. EPA Annual Lecture, New York, NY
<b>Jul 2020</b>	Muscles (and Pain): Improving Treatment Outcomes (in “spine pain”). Grand Rounds, Dept of Neurological Surgery, Weill-Cornell, New York, NY
<b>Oct 2020</b>	Soft Tissue: An Overlooked Cause of Chronic Pain. Grand Rounds, Dept of Anesthesiology, Weill-Cornell, New York, NY
<b>Nov 2021</b>	Pathophysiology, Evaluation and Treatment of Muscle Generated Pain. Grand Rounds, Dept of Anesthesiology, Weill-Cornell, New York, NY.
<b>Apr 2022</b>	Muscle pain and dysfunction in EDS. EDS Grand Rounds, Dept of Anesthesiology, University of Toronto (Royal College Accredited, Citywide).
<b>Sept 2022</b>	Muscle pain and dysfunction in EDS. IASP Musculoskeletal Special Interest Group. International Convention, IASP, Toronto, Canada.
<b>Sept 2022</b>	Low dose Naltrexone: Dose Determination for Nociceptive Pain in HSD/hEDS. International Consortium, EDS Society, Rome, Italy.
<b>Sept 2022</b>	Muscle generated pain in hEDS; Is it Adequately Addressed? International Consortium, EDS Society, Rome Italy.
<b>Jun 2022</b>	Muscle pain and dysfunction in chronic pain patients. Specialized Rehabilitation Hospital, Abu Dhabi, UAE.
<b>Dec 2022</b>	The Role of LDN in the Treatment of Chronic Musculoskeletal Pain, LDN Research Trust Webinar
<b>Mar 2023</b>	Is Muscle an Overlooked Cause of Chronic Pain, Grand Rounds, Dept of PM&R, University of Toronto
<b>Apr 2023</b>	The Role of Muscle In Chronic Pain Syndromes, Anesthesiology Pain Fellowship Gr. Rounds, Weill Cornell Medicine

#### **Webinars:**

1. Marcus, N. (2016, July 20). EDS & Pain [Webinar]. In EDS Awareness “Educational Series”. Retrieved from <https://www.youtube.com/watch?v=JA6RM95a3pk&feature=youtu.be>
2. Marcus, N. (2017). Muscle Pain Treatment [Webinar]. In Ehlers-Danlos Syndromes Physician CME Education. Retrieved from <https://ehlers-danlos-cme.org/courses/module-4-muscle-pain-treatment/>

## Journals:

1. Ruiz, Lowenson, Marcus, Langrod. *Treatment of Drug Addiction in Two Different Communities*. NYS J Med 1973;73:18.
2. Ruiz, Lowenson, Langrod, Marcus. *Social Rehabilitation of Addicts: A Two-year Evaluation*. Int. J of the Addictions 1977;1.
3. Marcus, N, Levin, G. *Clinical Applications of Biofeedback: Implications for Psychiatry: Hospital and Community Psychiatry* 1977;28(1).
4. Marcus, N. *Establishing Uniform Outcome Measures for Pain Treatment Centers*. APS Bulletin, December, 1991.
5. Marcus, N.J. (1997, April) *Technological advance amidst humanistic decline: Ignoring muscle evaluation and treatment in the modern age of medicine*. Journal of Back and Musculoskeletal Rehabilitation, 8 (2). pp. 83-85.
6. Kraus, H., Marcus, N.J. (1997, April) *The Reintroduction of an Exercise Program to Directly Treat Low Back Pain of Muscular Origin*. Journal of Back and Musculoskeletal Rehabilitation, 8 (2). pp. 95-108
7. Marcus, N.J. (1997, April). *Comprehensiveness, Uniformity and Standardization in the Evaluation of Patients with Complaints of Pain*. Journal of Back and Musculoskeletal Rehabilitation, 8 (2). pp. 89-94.
8. Marcus, NJ (2002, June). *Failure to Diagnose Muscle Pain Leads to Unnecessary Surgery*. Pain Medicine, 3 (2). pp. 161-166.
9. Marcus, NJ (2005). *Pain In Cancer Unrelated to the Disease or its Treatment*. Cancer Investigations, 23(1). pp 84-93.
10. Marcus NJ, Mense S (2006). Invited Response to Weiner and Schmader- Postherpetic Pain: More Than Sensory Neuralgia. Pain Medicine, 7(3).
11. Marcus, NJ., Gracely, E., Keefe, K. (2010) *A Comprehensive Protocol to Diagnose and Treat Pain of Muscular Origin May Successfully and Reliably Decrease or Eliminate Pain in a Chronic Pain Population*. Pain Medicine, 11(1).
12. Marcus NJ, Shrikhande AA, McCarberg B, Gracely E. (2013) *A Preliminary Study to Determine if a Muscle Pain Protocol Can Produce Long-Term Relief in Chronic Back Pain Patients*. Pain Medicine, 14(8).



13. Hansen, AE, Marcus, NJ. (2016) *Is It Time to Consider Soft Tissue as a Pain Generator in Nonspecific Low Back Pain?* Pain Medicine, 17(11).
14. Marcus, NJ, Schmidt, FA. (2020) *Soft Tissue: A Possible Source of Pain Pre and Post Minimally Invasive Spine Surgery.* Global Spine Journal, 10(2).

### **Books:**

1. Marcus N.J. and Arbeiter J. Freedom from Chronic Pain. New York: Simon & Schuster, 1994.
2. Marcus NJ. End Back Pain Forever. New York: Atria Books, 2012.

### **Chapters in Books:**

1. Mulholland T., Marcus N. *Disregulation of a Controlled EEG Response to Visual Stimulation in a Narcoleptic.* In: Psychophysiology. R. Sinz, M.R. Rosenzweig, eds. Amsterdam, Netherlands: VEB Gustav Fischer Verlag Jena (GDR) and Elsevier Biomedical Press, 1980: 263-273
2. Marcus, N.J. and Bleyer, A. *Outcome Measures in Pain Treatment.* In: Surgical Management of Pain Ed. Burchiel, K. Thieme, NY, 2002: 156-164
3. Marcus, NJ. and Bleyer, A. *Assessment of Neurosurgical Pain Treatments.* In: Handbook of Neurosurgery for Pain. Ed. Follett, K. Elsevier Inc (USA), 2004: 265-270
4. Marcus, NJ and Ough, J. *Evaluation and Treatment of Muscle Pain.* In: Comprehensive Treatment of Chronic Pain by Medical, Interventional, and Behavioral Approaches: The American Academy of Pain Medicine Textbook on Patient Management. Ed. Belval, B. Springer, 2012: 769-785.
5. Fanaee, E, Marcus, NJ and Blanck, T. *Outcomes Assessment.* In: Surgical Management of Pain Ed. Burchiel, K. Thieme. New York, 2014.
6. Marcus, NJ and Mense, S. *Muscle Pain: Pathophysiology, Evaluation, and Treatment.* In: Principles and Practice of Pain Medicine. Ed. Bajwa, Z, Wootton, N, Warfield, C. Elsevier, 2016.
7. Marcus, NJ. Target: The muscle as a pain generator and key element to protect during MIS surgery. In: *Ten Step Techniques for Minimally Invasive Spine Surgery.* Ed. Hartl, R, Navarro-Rodriguez, R. Thieme. New York, 2020

## Other Articles:

### *Original Communications in Non-Reviewed Publications:*

1. Marcus, Norman. "The Value of Patient Communications in Pain Management." *Mediguide to Pain*. 1985;6:3.
2. Marcus, Norman. "Rationale for the Treatment of Acute Intractable Pain." *Lenox Hill Hospital Pharmacy and Therapeutics Newsletter*. 1985;2:4.
3. Marcus, Norman. "Rationale for Multidisciplinary Treatment of Chronic Pain." *Pain and Analgesia* 1986; 2:1.
4. Marcus, Norman. "A Rational Approach to the Treatment of Cancer Pain." *Home Infusion News* 1992; 2:5.

### *Letters to the Editor (Reviewed Journals):*

1. Marcus, NJ. "Letter to the editor: Comments on Culture and Pain." Morris D. *The Wilson Quarterly*, Winter 1995.
2. Marcus N.J., Kraus H., Rachlin E.S. "Letter to the editor: In response to Hopwood and Abram." *The Clinical Journal of Pain* 1995;11:84.
3. Marcus N.J., Kraus H., Rachlin E.S. "Comments on K.H. Njoo and E. Van der Does." *Pain* 1995; 61:159-160.
4. Marcus, N.J. "Treating nonacute pain in the cancer population [comment]". [comment. Letter] *Pain Medicine* 2007. 8(6): 539-540.
5. Marcus, N.J. "Response to Letter to the Editor by Dr. Cohen and Dr. Quintner." *Pain Medicine* 2008. 9(4); 466-468.
6. Hansen, AE, Marcus, NJ. Response to Letter to the Editor by Dr. Schneider et al. *Pain Medicine* 2017.
7. Hansen, AE, Marcus, NJ. "How and why Hans Kraus, MD, helped President Kennedy's back pain." *Journal of Neurosurgery: Spine* 2018.
8. Marcus, NJ, Hansen, AE. "Response to the Enigma of Muscle Pain: A Neglected Entity." *Pain Medicine* 2020. 21(2); 429-430.

9. Marcus, NJ, Hansen, AE. "Reply to Response." *Pain Medicine* 2021. 22(2); 527.

***Magazine Articles:***

1. Marcus, Norman. "Understanding Your Pain." *Mature Choices*, Fall issue 1994.

***Letters to the Editor (Newspapers):***

1. New York Times, 10/14/97, *Technological Advance and Humanistic Decline*.
2. New York Times, 3/10/99, *Work-Place Injuries - Ignoring Muscles*.

***Lay Press Recognition***

1. Who's Who in American Education – 7<sup>th</sup> Edition  
Who's Who in America – 58<sup>th</sup> Edition  
Who's Who in the East – 23<sup>rd</sup> Edition
2. Castle Connolly Top Doctors in Pain Management in NY Metro Area, 1998-2023
3. New York Magazine Top Doctors in Pain Medicine, 1998-2002, 2005, 2010, 2020-3

**GRANTS:**

- 1988** UNUM Insurance- \$26,000 pilot study to assess uniformity of data collection at CARF accredited pain centers.
- 1994** Medtronic, Inc. \$500,000 Development of a uniform outcome test instrument for pain treatment.

**Patents:**

- 1997 Technique To Evaluate and Treat Muscle Pain  
Utilizing an Electrical Stimulation Device
- 2006 (With Stevens Institute of Technology)  
A Portable Electrical Stimulation Device To Diagnose Muscle Pain
- 2023 Muscle and Fascia Pain Identification by Electrical Stimulus