American Vein & Lymphatic Society Meeting

# Development of Sleep Medicine as a Medical Specialty

Lawrence J. Epstein, MD Brigham and Women's Hospital Harvard Medical School Past President, American Academy of Sleep Medicine

## Disclosures

- Consultant to:
  - American Academy of Sleep Medicine
  - AIM Specialty Health
  - eviCore Healthcare
  - Somnoware Healthcare Systems.

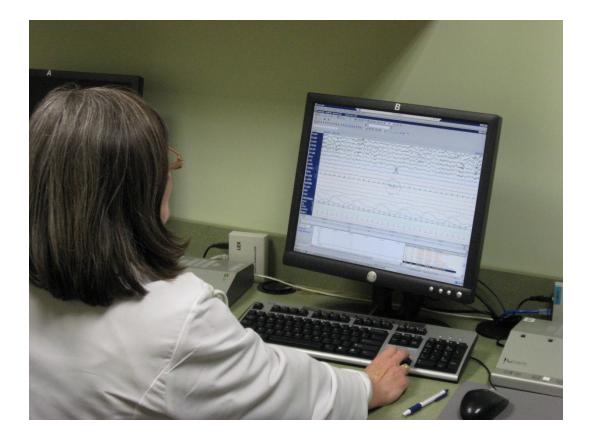
# Agenda

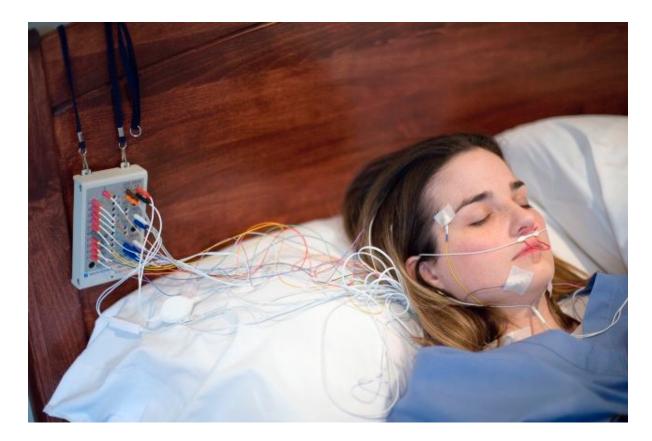
- History of sleep medicine
- History of sleep organizations
- Achieving recognition as a specialty field

# Field of Sleep Medicine

- Relatively new field of medicine
  - ACGME fellowships 2005
  - ABMS board examination 2007
- Multidisciplinary
  - Internal medicine, neurology, psychiatry, family medicine, otolaryngology, anesthesia
- Sleep disorders are common
  - >70 disorders (Internal Classification of Sleep Disorders, 2014)
  - 50-70 million suffer chronically from disorders of sleep and wakefulness (NHLBI. National sleep disorders research plan 2003)
  - Have significant health, quality of life and health care cost consequences

#### How Did We Get Here?





# History of Sleep

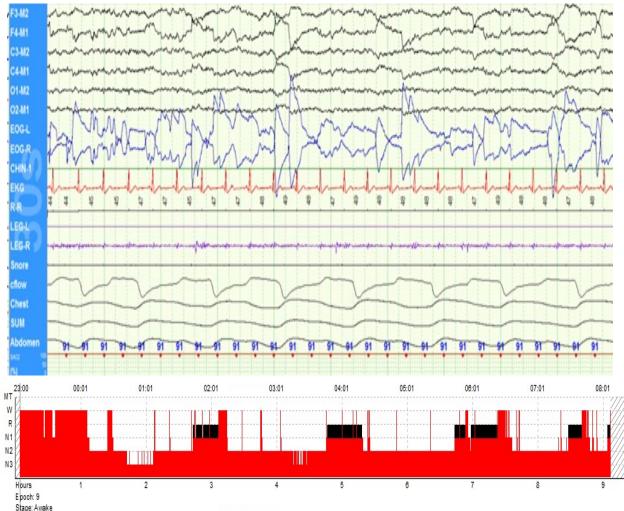
- 1875: Action potentials in the brain of rats Richard Caton
- 1925: Measurement of human brain electrical activity, EEG -Hans Berger
- 1937: Brain wave changes on EEG during sleep - Alfred Loomis



"He's always asleep. Goes on errands fast asleep, and snores as he waits at table." Charles Dickens – Pickwick Papers, 1836

# History of Sleep

- 1950's: Overnight recording of sleep
  - 1953: Discovery of REM sleep – Azerinsky & Kleitman
  - 1957: Human sleep cycle described – Dement & Kleitman
- 1960's: Sleep disorders
   1960: Narcolepsy Vogel
   1966: OSA Gastaut



Shepard et al. J Clin Sleep Med2005; Kirsch Chest 2011

# History of Sleep Medicine

- 1972: 1<sup>st</sup> Sleep Disorders Center
  - Stanford Sleep Clinic
  - William Dement, MD
  - Promoted clinical practice model:
    - Sleep specialist guiding care of sleep disorders patients.
    - Nocturnal polysomnography to evaluate sleep
    - Quantitative measurement of excessive daytime sleepiness

# **Sleep Organizations**

#### **Sleep Research Society**

- Established in 1961 as the Association for the Psychophysiological Study of Sleep
- Focus on
  - Scientific methods for measuring sleep and wakefulness
  - Neuroanatomy and physiology of sleep
  - Circadian biology and physiology

#### **American Academy of Sleep Medicine**

- Established in 1975 as Association of Sleep Disorders Centers
- Focus
  - Organization representing sleep specialists and sleep centers
  - Establish and maintain standards for the evaluation and treatment of sleep disorders
  - Promote the role of sleep and sleeprelated disorders in clinical medicine

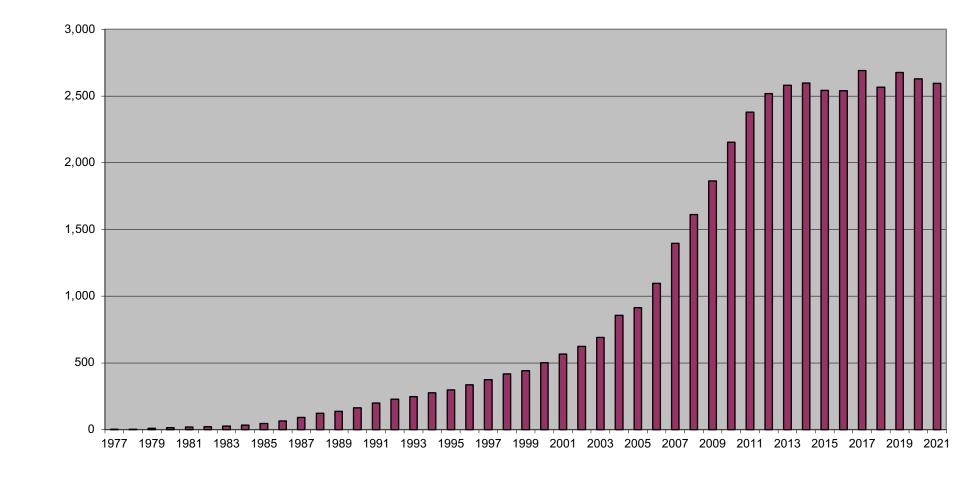
# Path to Recognition

- Establish and maintain clinical standards
- Establish an examination process for specialists
- Provide forums for the exchange of information
- Establish and review a standard diagnostic classification
- Educate clinicians and expand the field.

- Sleep Center Accreditation standards and process 1977

   Clinical Practice Guidelines 1979
- American Board of Sleep Medicine 1978
- Journal SLEEP 1978
  - Annual joint meeting 1986
  - Journal of Clinical Sleep Med 2005
- Nosology: Classification of Sleep Disorders 1979
- Fellowship Training Progams 1989

### AASM Accredited Sleep Facilities 1977-2021



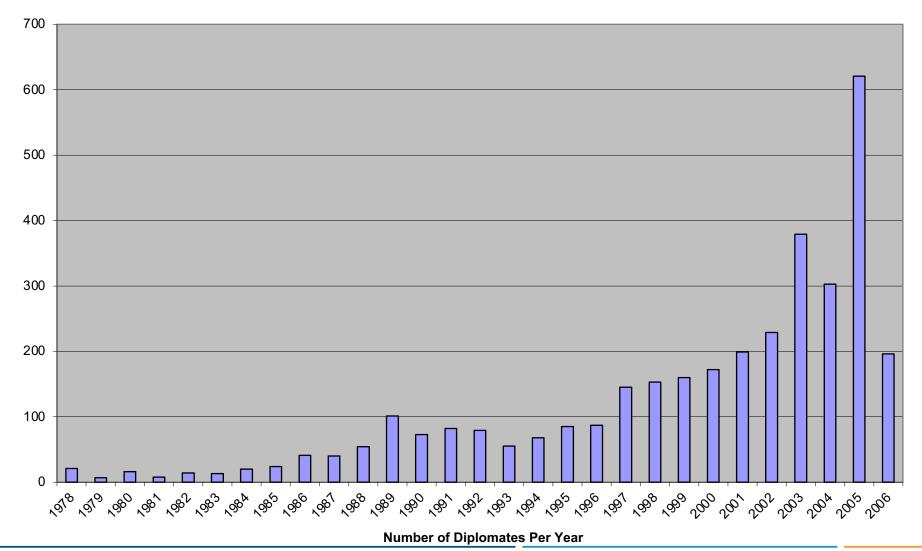
Year

AMERICAN ACADEMY OF SLEEP MEDICINE

**Accredited Centers** 

Source: American Academy of Sleep Medicine

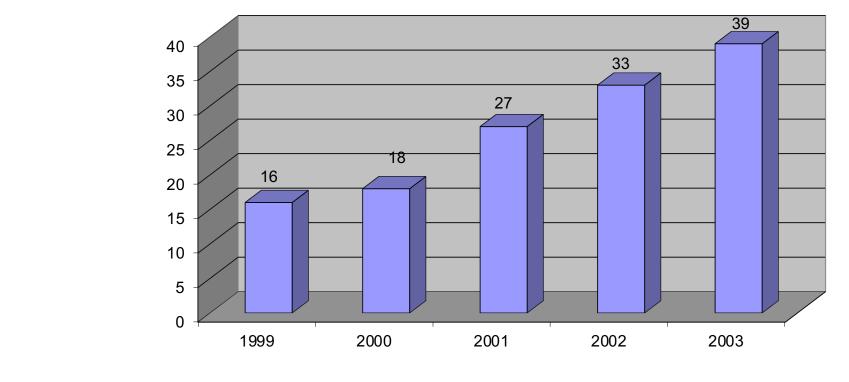
### **ABSM: Board Certified Sleep Specialists**



AMERICAN ACADEMY OF SLEEP MEDICINE

#### Source: American Academy of Sleep Medicine

### Fellowship programs





Year

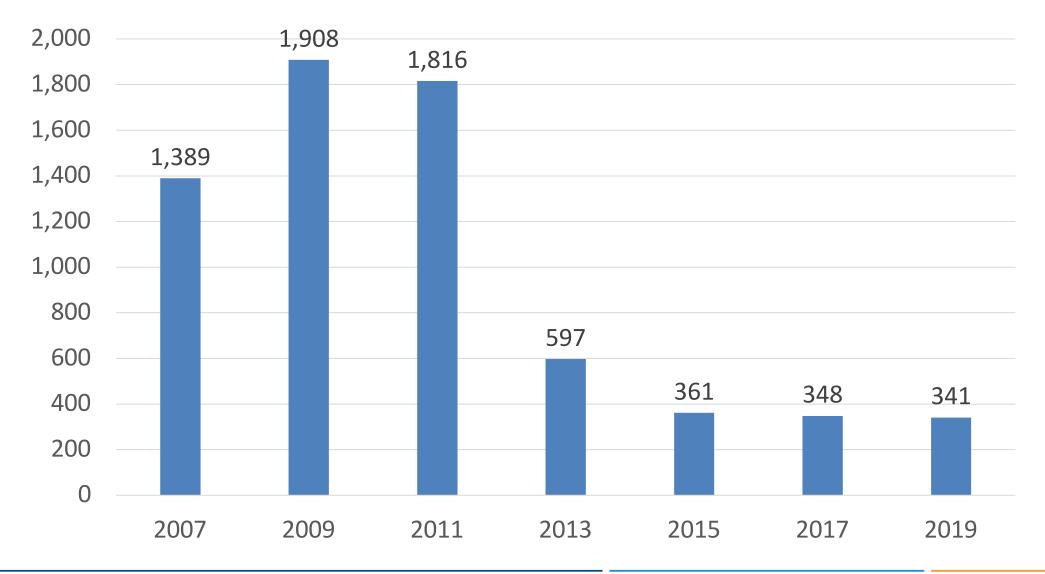
# **Specialty Recognition**

- Approached education and exam organizations
  - Accreditation Council for Graduate Medical Education (ACGME)
  - American Board of Medical Specialties (ABMS)

# **Specialty Recognition**

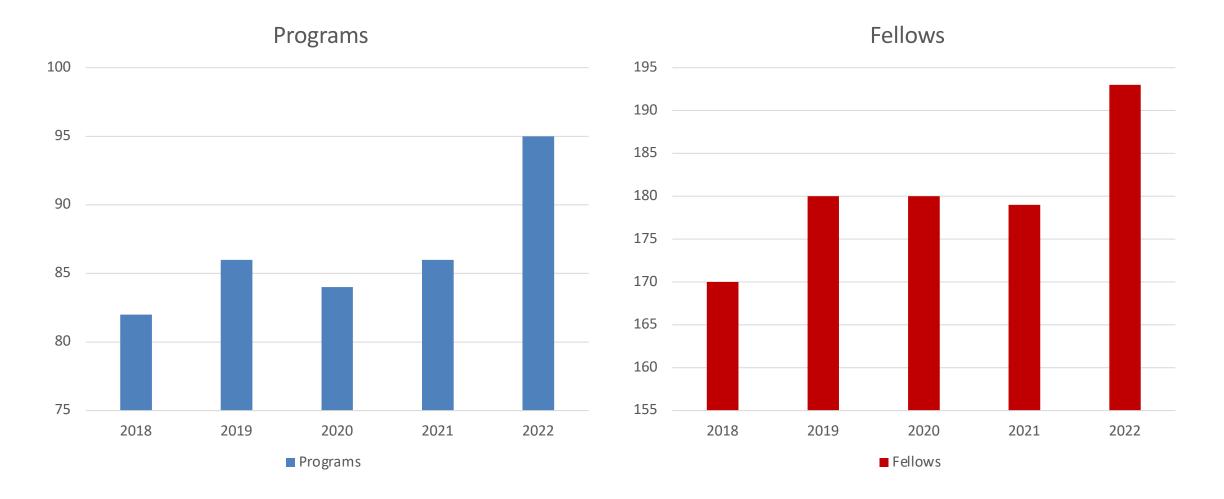
- Approached education and exam organizations
  - Accreditation Council for Graduate Medical Education (ACGME)
    - Fellowships accredited starting 2005
  - American Board of Medical Specialties (ABMS)
    - Board certification examination 2007

## **ABMS Sleep Diplomates**



Source: American Academy of Sleep Medicine

### **Fellowship Match**



#### AMERICAN ACADEMY OF SLEEP MEDICINE

#### Source: National Resident Matching Program

# Path to Recognition

- Develop independent area of interest
- Establish standards for field
- Attract practitioners
- Provide forums for exchange and organizing
- Educate clinicians
- Demonstrate clinical competence