

Top 8 Insights: Dr. Michael Muhonen

1. Introduction

Dr. Michael Muhonen is a pediatric neurosurgeon at The Children's Hospital of Orange County (CHOC), where he has cared for young patients for roughly 30 years.

2. Why Neurosurgery?

Dr. Muhonen knew he wanted to enter neurosurgery as far back as high school. The defining moment came when his four-year-old brother was struck by a car. Watching the attending neurosurgeon, Dr. Muhonen thought, *"I could take better care of this child than this doctor."* He felt the family barely saw the surgeon, who only dropped by at 10:00 p.m. for 30 seconds. That experience, paired with a fascination for the brain, ignited his desire to provide better, more attentive patient care.

3. A Day in the Life

A typical day begins early:

- **6:30 a.m. – ICU & Inpatient Rounds:** Checks on yesterday's surgical patients and trauma cases alongside his physician assistant, residents, and medical students.
- **7:30 a.m. – Surgery Starts:** Performs scheduled operations throughout the morning and early afternoon, often fitting in urgent emergency cases between procedures.
- **2:00 p.m. – 5:00 p.m. – Clinic Consults:** Sees roughly 10 patients in the office for follow-ups and consultations.
- **5:00 p.m. – Evening Tasks:** Returns to the hospital to check on the day's surgical patients, review lab results and scans (CT/MRI), and finish electronic medical record paperwork—a necessity he calls a physician's biggest daily nuisance.
- **7:00 p.m. – 8:00 p.m. – Wrap-Up:** Finishes the workday, unless he is covering the emergency room call for the night.

4. The Hardest Part

Having performed over 10,800 procedures, Dr. Muhonen admits he cannot recall every successful surgery, but he vividly remembers every single patient who passed away. The hardest part of the job is finding the emotional strength to keep operating after an adverse outcome. Doing so requires resilience, self-trust, and strong confidence in one's skills.

5. Proudest Moments

Rather than a single career highlight, Dr. Muhonen points to several memorable milestones:

One of his proudest experiences was walking one of his patients down the aisle at her wedding because she did not have a father in her life. Other proud moments include seeing students he mentored graduate and become neurosurgeons themselves, which has happened three times. He is proud knowing he influenced their lives positively and helped guide them into the profession.

6. Managing Student Debt

Graduating with **\$300,000 to \$500,000** in student debt is standard in pediatric neurosurgery. While this amount can feel overwhelming, he believes it should motivate individuals to finish their training. He views student debt as an investment in the future and compares it to planting seeds for a future harvest.

7. The Educational Journey

Becoming a pediatric neurosurgeon requires roughly **17 years of education and training after high school**:

- **4 years** of undergraduate studies
- **4 years** of medical school
- **1 year** of internship
- **7 years** of neurosurgery residency
- **1–2 years** of specialized pediatric fellowship

Although you don't earn a full attending salary until your mid-30s, Dr. Muhonen notes that taking it step-by-step makes the long road manageable, and the long-term rewards make it entirely worthwhile.

8. Passion vs. Paycheck & The Field's Future

- **Money Over Passion?** Dr. Muhonen believes doing this job solely for money is unsustainable. He has seen surgeons enter the field purely for high earnings, only to burn out and leave because they lacked genuine passion for the work.
- **The Evolution of Neurosurgery:** The field has steadily shifted toward smaller, more precise interventions. Breakthroughs like stereotactic computer guidance allow for tiny incisions with high accuracy. Looking ahead, advancements like gene therapy (using viral vectors to repair genetic defects in the brain) promise to transform care even further. While brain surgery remains too delicate for fully automated robots today, future technology may bridge that gap.