

# Interview #1: Dr. Alayagari

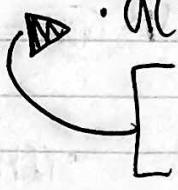
9/12/18

## \* day-to-day work

- Neurocritical care

- Academic inst.

(many roles)



- providing patient care
- medical education
- research

## \* Clinical care

- taking care of patients w/ severe diseases

- patients: unhandy / tricky

- breathing machine

- pressure monitor

- seizures

- no outpatient clinic

↳ ICU + to new ICU

• no 24/7 hour camera



continuous monitoring of brain waves

## \* Brain waves activity

- depends wake/sleep

- normal → dif patterns

- dream... REM → brain wave cycle theta.

- brain injury

- abnormal

→ seizures = can't be visible until  
brain wave flat

## \* Medical education

- residents / students

- neurological exams + taught

## \* Research project

- many dif

- examining changes in pupils of eye → correlation of  
brain injury severity

- using recording eye

## Mechanisms

- acute BP in brain blood
- strokes
- ↓ BP: ↓ brain damage

## \*Background

- India
    - medical school
    - 17 years old!!
    - calcutta ...
    - 5 year neurology
    - residency
  - NIMHNS
    - residency (2nd)
    - 2 years fellowship
    - neurocritical care
  - now academic ... ❤ it
- ↑ sodium values
- $\text{Na}^+$  → not harmful  
    > 160 ... bad
- renal
- induction in electrical impulses
- give patterns of solutions Na<sup>+</sup>
- strike brain cells
- ↓ calcium  
↓ lactic acid  
↓ ATP ↓ tech  
↓ no

## → most interesting

- neurological exam .. clinical test
- neurocritical care : brand new
- interest in epilepsy
  - abnormal discharge from brain
  - seizures from temporal lobe ... etc numerous functions

## epilepsy:

- start off w/ genetic disorders .. brain metabolism
- weird things .. scars in deep brain
  - continuous discharge → differentiated activity from circuits minicolumns microcolumns

new... psychology

(→ specialize w/ Behavioral Neurology ... overlap)

\* One week off - one week on

• Clinical week

• 7 AM - 7 PM

• On call at night too

• next week: off

• recharge

• research

• learn

(→ more formal)

• residents follow around

} teaching during both

neurology

(→ email for patient)

(→ colleagues)

\* neurocritical care

• patients: unconscious

• talk to fam. members

• test results

\* neurology

• part of clinical medicine

► Clinical

• CT scan  
• EEG

} limited behavioral tests

\* neurology changing

• not ... genetic engineering

(helps a lot)

\* greatest achievement

• not one ... when patients are getting better