

# Effect of COVID-19 on the Academic Mission in Boston

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**Boston Children's Hospital**  
Until every child is well™



HARVARD MEDICAL SCHOOL  
TEACHING HOSPITAL

# BCH Clinical Operations

## System Level Changes

- Limited space an issue, pre-COVID!
- All individuals screened prior to entering hospital and required to wear mask
- Designated “Clean” vs. “Contaminated” (respiratory) clinics
  - Partnership – Adol Med + Gen Peds
- **Mantra:** Conservation + efficient use of PPE
  - Conserving while protecting pts/staff
- **Pediatric “Reservoir”:** Admitting pediatric patients from other hospitals to increase their capacity to serve COVID+ adults
- Expanded remote work policy – all employees



# BCH Clinical Operations

## Impact on Patients:

- Limited visitors
  - Two adult caregivers per child)
- Use of technology in clinical care
  - Patients may connect with additional “visitors” virtually
  - Provider-to-provider communication - virtual
  - Provider-to-patient (from hallway)
  - Telehealth for non-urgent outpatient visits (limits exposure and use of PPE)
    - Ideal for many consult visits
    - 40% - Adol Clinic volume

## Impact on Staff:

- Remote work
  - Adjustment to telehealth for clinical staff literally overnight
  - Feelings of isolation
- Clinicians over age 60 asked to stop all in-person clinical work
  - Short-staffed
- Changes in protocol designed to limit viral spread, promote safety, and limit use of PPE
- Messaging daily from Hospital Leadership
  - Daily 5pm meeting – clinical leaders



# How is HMS Responding?

- Classes/programs converted to online
  - Medical students pulled out of clinics/wards
- Medical students mobilized volunteer teams, providing support to patients, physicians, and nurses on front lines
- Option explored for 4<sup>th</sup> year medical students to graduate early and be quickly deployed into hospitals where staff overwhelmed with COVID-19+ patients
- One of the first U.S. universities to put research in basic laboratories on hold
- All research transitioned to remote work
- Work for student virtual vs. in-person/clinical



# Impact on Clinical Research

- Much of clinical research suspended until further notice
  - Select interventional studies continued
  - Potential impact on timelines
    - Enrollment, recruitment, follow-up visits
  - Impact on interventions - timing
  - Consistency in protocol (lack thereof)
- All research assistants, administrative assistants, and technicians are working remotely



# Impact on Basic Research

- Laboratory research on hold x ~12 weeks
- Lab technicians and other staff working remotely
- Shift of work to preparation of manuscripts, grants, manuals of procedures, etc.
- Delay in planned experiments
  - Major impact on post-docs
- Slowly reentering labs, with 25% of staff coming back...
  - But how does the lab function?



# Examples of impact on individual studies ....



# Hutchinson-Gilford Progeria Syndrome

- Rare, fatal genetic condition (1 in 4 million)
  - Model of and appearance of accelerated aging
- Strikingly similar phenotype
- Mutation creates cryptic splice site in *LMNA*
  - Normal lamin A + “progerin”
  - Nuclear membrane distortion
    - Other cellular defects
- Travel internationally to Boston for a clinical trial
  - Travel ban made impossible
  - Telehealth advice immediately initiated
  - Partnership with local doctors around the world





# New R01: Pubertal Blockade in Transgender Youth

## HD101421-01

### NOA: 4/2/2020

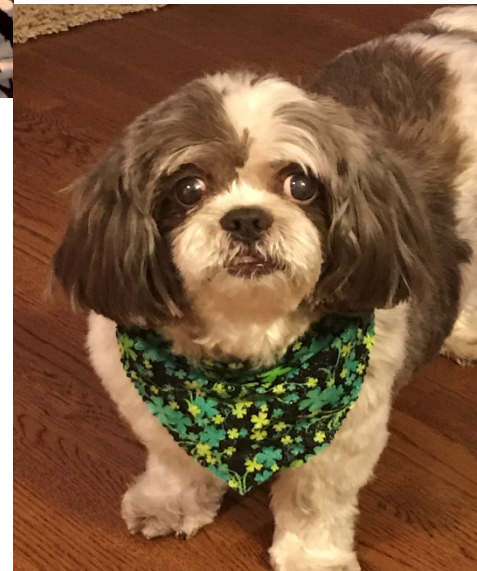
(in midst of shelter-in-place)

- Making Manual of Procedures
- Case report forms
- Building REDCap database
- Hiring, “on-boarding” staff
- Start up meetings
  - DSMB
- Calibrating scanners
  - Two-site study
- What’s next?



# Effects of COVID on Personal Life

- College age son now home
  - Semester abroad (Spain) cut short
- 11<sup>th</sup> grader - virtual classes 3-4 hr/day
- As parent: supervising a home school!
- Conference calls in next room
  - With dog barking!
- Job interviews (via Zoom):
  - New research coordinator (R01)
- Trying to run a 100-member division remotely
  - 2 days/week in office
  - 1 day/in-person clinic
  - Virtual consult visits
- All research/administrative meetings via Zoom



# Response to Dual Crises: COVID-19 and Racism



Thank you and be well!



*Eunice Kennedy Shriver* National Institute  
of Child Health and Human Development