Research ramp-up planning
Process: two main committees

Danforth

Patty Weisensee - McKelvey/MEMS
Jon Silva - McKelvey/BME
Matt Krueter – Brown School
Leo Cabassa – Brown School
Amy Eyler – Brown School
Deanna Barch A&S – Psychological & Brain Sci.
Joe Jez A&S – Biology
Bill Tolman A&S – Chemistry
Bruce Backus - EH&S
Angie Dartt - EH&S
Johnnie Cartwright – OVCR
Jenny Lodge – VCR

WUSM

Dave Piston – Cell Biology
Lila Solnica-Krezel - Dev. Biol
Chris Gurnett – neurology (ICTS)
Chuck Zorumski - psychiatry
Yi Zhang – oncology/CCS
Aaloke Mody – I^2/Inf Diseases
Jen Philips – Inf Diseases
Susan Cook – EH&S
Max Amuro – EH&S
Johnnie Cartwright – OVCR
Jenny Lodge – VCR

Process: additional committees

Human subjects research:

WUSM: Suresh Vedantham, Sam Klein, Randy Bateman, Pam Woodard, Ramaswamy Govindan, Yi Zhang, Chris Gurnett

Danforth: Deanna Barch, Mitch Sommers, Cindy Brantmeier,

IRB/HRPO: Amanda Cashen, Jeannie Velders,

Metrics, data, modeling

Public health, ID: Bill Powderly, Steve Lawrence

Infection control: Hilary Babcock, Dave Warren

Data and modeling: Elvin Geng, Philip Payne

Occ Health: Eva Aagaard

Guidance documents and templates

Danforth: Bill Tolman, Patty Weinensee

WUSM: Jen Philips, Dave Piston

EH&S: Angie Dartt, Susan Cook

Humanities and Social Sciences (just getting underway)

Jean Allman

Peter Kastor

Law - TBD

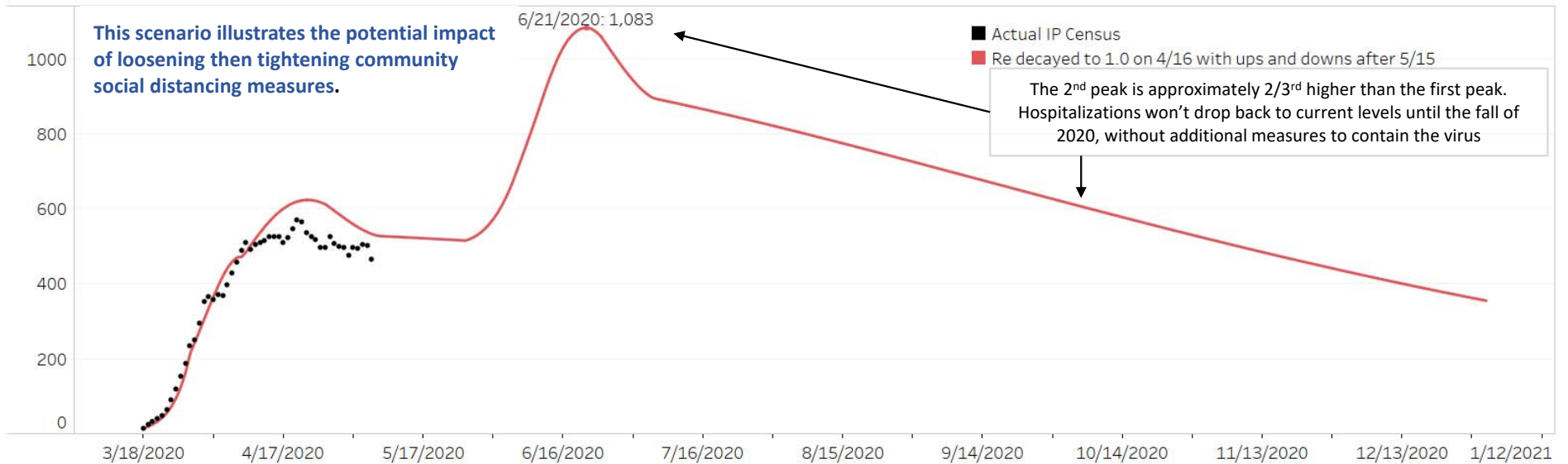Sam fox - TBD

Olin - TBD

Libraries - TBD

Principles

- Health, Safety and well-being of the WashU research community, the WashU community, the St. Louis region, our human subjects research participants, and the world.

- Follow state and local government restrictions

- Evidence and metric based decision making – these may change over time

- **Leadership will make decisions of when** to move from one level to the next. These decisions will be based on available metrics, additional metrics could be used as additional testing, analysis and data become available.

- **PIs will make decisions about prioritizing which** of their research to ramp up, within the stipulations and limitations of the current level. Careers of trainees should be taken into consideration in the plans. The department and school should review plans for adherence to guidance.

- **Ramp up deliberately and in phases** in order to monitor outcomes and to respond to local outbreaks and changing conditions. Ensure sufficient advance planning and flexibility to enable us to react reasonably quickly to changing situations

- **Identify necessary preparations to respond to a resurgence of COVID-19 and be able to ramp down, as well as continued progress towards normalcy.**

- Ability to contribute to the efforts to prevent and treat SARS-CoV-2, develop testing to enable better health care, public health, and decision making, and develop and refine predictive models for the COVID-19 pandemic.

- Dedication and commitment to our research and education (and clinical for WUSM) missions

- Respect the different disciplines that are present in our schools

- Different schools may implement more strict guidelines for their schools.

- Effective communication to investigators, departments and schools should be regular and informative.
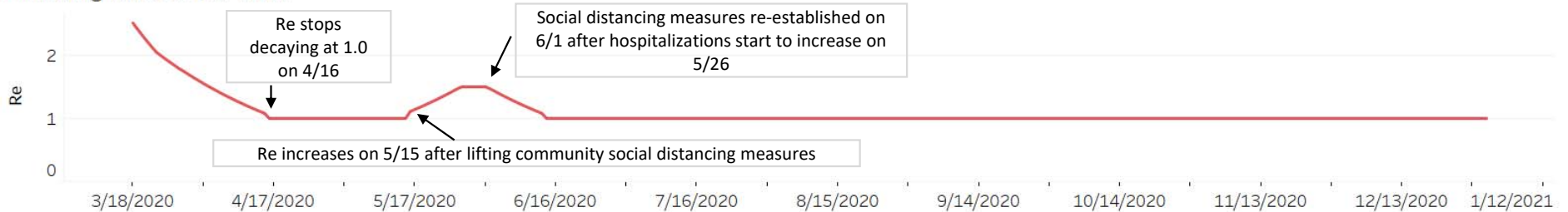
Levels

- Red Level 4 - Current state as of 5/5/20
    - research activity highly restricted
- Orange Level 3
    - To test whether plans for labs, offices and shared spaces are working effectively, initiate ramp-up that includes shifts to reduce density with overall ~30% research activity.
    - Goal is to move to Yellow Level within 4-6 weeks, providing STL/WUSTL situation continues to improve. Be prepared to move back to Level 4 if STL/WUSTL situation deteriorates
    - monitor and assess social distancing in multiple areas (research labs, offices and common areas (shared research, corridors, elevators, break room etc).
    - Identify bottlenecks, and correct any areas where social distancing is problematic
- Yellow Level 2 continue ramp-up, with an emphasis on utilizing shift work to achieve social distancing and prevent crowding both in laboratories/offices, but also in shared spaces.
    - continued monitoring ability to social distance in multiple areas, including research labs, offices and common areas (shared research, corridors, elevators, break room etc).
    - Identify bottlenecks, and correct any areas where social distancing is problematic
- Green Level 1. New normal
    - Most, if not all, research has resumed
    - Social distancing somewhat relaxed, but large gatherings are still discouraged.

Planning Scenarios: Re Increase Triggers Community Response After 5/15

Projected and Actual IP Census for St. Louis MSA Based on SIR Model

This scenario illustrates the potential impact of loosening then tightening community social distancing measures.

6/21/2020: 1,083

■ Actual IP Census
■ Re decayed to 1.0 on 4/16 with ups and downs after 5/15

The 2nd peak is approximately 2/3rd higher than the first peak. Hospitalizations won't drop back to current levels until the fall of 2020, without additional measures to contain the virus

Trending of Re Over Time

Re stops decaying at 1.0 on 4/16

Social distancing measures re-established on 6/1 after hospitalizations start to increase on 5/26

Re increases on 5/15 after lifting community social distancing measures

Illness: 14d | Hospitalization Rate: 6% | ICU Rate: 30% | Vent Rate: 75% | Time to Hospitalization: 10d | Time to ICU: 1d | Time to Vent: 1d | IP LOS: 11 d | ICU LOS: 8d | Vent LOS: 10d
Current best projection is produced using online tool.
Other models are produced using backend coding.

From Keith Woeltje, WUSM and BJC

5

Major elements

- **Planning**
  - Social distancing….
  - Training/signage
  - social distancing….
  - Masking
  - Screening for symptoms
  - social distancing…
  - Shift work/cohorts
  - Hand washing, surface disinfection
  - Social distancing….
  - Prepare to ramp down
- **Implementation/Assessment**
  - Included in the plans
  - Spot checks

Moving from one level to another (up or down)

- Decisions to move will be made by leadership
- Communicate with research community about timing, to the extent possible
- Lifting of stay at home orders are a prerequisite to begin the ramp-up, but are <u>not</u> the determining factor of the timing.

- Researchers should be considering that they may have to shut down as well as ramp-up.

Metrics for use by leadership to move from one level to the next

- Currently available, relatively stable data where the criteria shouldn't change over time.
  - Stay at home orders - status
  - Health care systems capacity - status
  - Trends in hospital admissions (lagging indicator; 2-3 weeks)
  - Trends in occupational health calls (lagging indicator; 1-2 weeks); however, onset of flu season next fall could impact the # of calls.
- Data that could be considered in the future:
  - % fails on self screen app - don't have systems yet,
  - Testing for virus - capacity not available (supply chain and equipment limitations), sensitivity not validated, NP swab unpleasant, testing only valid for short time, 24-48 hr turnaround, criteria for testing may change over time so may not be able to compare one day to the next.
  - Saliva test not yet ready for prime time.
  - Testing for antibodies – not validated, little capacity, not clear what the answer means
- Data to strive for?
  - A good option – a validated, saliva test surveillance where we could track STL community and WUSTL community to determine if WUSTL is increasing at a more rapid pace than STL community. Indicator that we are moving too fast.
  - Ideally – validated, saliva-based home test that everyone would take before coming to campus every day.

Research specific items to address

- **Research activity**
  - approximate fraction of normal activity/Allowable activity
- **Social distancing/density**
  - Labs –
    - PI will need to develop plans for social distancing for the various levels of activity in labs
    - Provide PIs guidance, checklists, floorplans, and templates for plan development
    - Department will review and approve
  - Offices and office areas for researchers
    - Identify activities that can be done remotely
    - For shared desk spaces, PI should include social distancing in plans
  - Shared research spaces - might be at the department or school level for planning, will need to provide guidance.
    - Shared equipment, Common equipment rooms, maker space
    - Core facilities/animal rooms/greenhouses
- **Enhanced cleaning and hygiene**
  - cleaning of surfaces/encourage hand washing,
- **Non-lab based research**
  - human subjects research – recommendations being developed by another committee that includes both clinical and behavioral scientists.

- Will have to address off campus/international human studies research
- office based research (computational, humanities)
- Off campus research
- **lab meetings/dept meetings/seminars**
- **Training:**
  - information about risk factors and transmission,
  - proper hygiene,
  - appropriate PPE,
  - social distancing
- **Compliance with plans**
- **Personnel**
  - Develop a mechanism for collecting and resolving complaints if a person believes they are not safe on campus due to lack of social distancing, PPE use/availability.
  - Need a mechanism for assessing risk factors and developing reasonable accomodations that respects privacy.
  - Faculty, Staff, Post-graduate trainees, PhD/MSTP graduate students, Professional students (?), Master's students, Undergraduate students, High School Students

Campus-wide issues:
    Recommendations made to WUSM and WUSTL leadership

- screening to come onto campus
- masks while on campus
- monitoring of buildings; limited entry access
- Signage for common areas
- Enhanced cleaning of commonly touched items (eg. door handles)
- hand sanitizer stations
- Accommodations for child care
- Access to library and collections for humanities and other research
- Other services (food, parking)
- Protocol for when a researcher tests positive for COVID
- Travel outside STL region

Planning and action items:

- Highest priority
  - Development and implementation of training modules - **Action item**: EH&S and OVCR already working on this)
  - Develop an app for self check - **Action item** : In progress
  - Develop plans for limited building access (if needed)
  - Develop guidance for PIs, core directors, chairs regarding plans – **Action item**: almost complete
  - develop checklist and form for plans - **Action item** : already underway with committee
  - develop database for plans **Action item** – already underway with OVCR research analytics group
  - Determine necessary cleaning supplies, and work with resource management to obtain cleaning supplies and masks **Action item** – work with resource management
  - Determine how to address compliance questions/concerns (eg use existing COVID hotline, develop new mechanism). **Action item** – work with EH&S or develop new intake
  - (WUSM specific), work with DCM to develop plans for increasing caretaker staff in advance of increasing census. **Action item** – underway

Planning and action items:

- High priority
  - Messaging to schools, departments, faculty, trainees and staff around likely timeframe for ramp-up.
  - Schools identify common areas, determine who is responsible, and assign a point of contact
  - PI develop plans for their group and submit to dept;
  - develop signage for common areas (shared instrumentation rooms, break rooms etc),
  - determine core facility needs and prepare them for ramp up
  - work with library to provide access to critical materials not available online
  - determine if access to specific buildings should be restricted with signage regarding self screening.

Questions/concerns/comments??