Interdisciplinary team from Hopkins and several other institutions

Goal: “to establish and maintain a centralized compendium of scientific articles on SARS-CoV-2, including summaries and quality assessments for each.”

Eight topic areas:
- Diagnostics
- Modeling
- Epidemiology
- Pharmaceutical Interventions
- Non-pharmaceutical Interventions
- Clinical Presentation & Prognostic Risk Factors
- Vaccines
- Ecology & Spillover
PubMed and preprint servers (bioRxiv, medRxiv, SSRN)

Screening process in Shiny (R package)

Article selected for review

Write Expert Summary Sheet and submit

Single editor

Post to website

Hand picked article

Don’t match search terms

Not deemed important for NCRC

Not deemed important for NCRC
Diagnostics search strategy (PubMed)

("Specificity"[tiab] OR "sensitivity and specificity"[mh] OR "PCR"[tiab] OR "polymerase chain reaction" OR "rapid test" OR "false positive" OR "false negative" OR "positive predictive" OR "negative predictive" OR "predictive value" OR "immunoassay" OR "clinical diagnosis" OR "assay" OR "point of care testing" OR "diagnostic testing" OR "diagnostic performance" OR "diagnostic utility" OR "differential diagnosis" OR "molecular diagnosis") AND


### Study Groups:
- Clinical presentation
- Diagnostics
- Disease modeling
- Ecology and spillover
- Epidemiology

### Papers in Study Area:
- Knowledge and Perception Towards Universal Safety Precautions During Early Phase of the COVID-19 Outbreak in Nepal. (Journal of community health)
- Continuous Electroencephalography (cEEG) Characteristics and Acute Symptomatic Seizures in COVID-19 Patients (medrxiv)
- Predictions for Europe for the Covid-19 pandemic from a SIR model (medrxiv)
- Automated and partially-automated contact tracing: a rapid systematic review to inform the control of COVID-19 (medrxiv)
- Aerosol blocking assessment by different types of fabrics for homemade respiratory masks: spectroscopy and imaging study (medrxiv)
- The association of UV with rates of COVID-19 transmission and deaths in Mexico: the possible mediating role of vitamin D. (medrxiv)
- Thermal Disinfection Inactivates SARS-CoV-2 in N95 Respirators while Maintaining Their Protective Function (medrxiv)
- Knowledge, attitude, and practice regarding COVID-19 outbreak in Bangladeshi people: An online-based cross-sectional study (medrxiv)
- Meta-regression of COVID-19 prevalence/fatality on socioeconomic characteristics of data from top 50 U.S. large cities (medrxiv)
Screening Process

• Does it fit the topic area?
• Should another group review it instead?
• Original research?
• Relevant to a public health audience?
Expert Summary Sheet

- “our take” and “value added”
- a summary of the study and results
- our assessment of the article’s strengths and limitations

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<thead>
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<th>Study design:</th>
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<td>□ Case-series</td>
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<td>□ Modeling/Simulation</td>
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Description of study population and setting/model: Describe the geographic setting and dates of data collection. Include number of study participants (break down by exposed and unexposed in intervention assessment) and note if there are any defining characteristics of the study population of relevance to reviewers (e.g., pregnant women). Please be brief 1-3 sentences, maximum. Note: If this is a modeling/simulation analysis describe the model and target population.

Provide a summary of the primary results. Please be brief 1-4 sentences, maximum.

Study Strengths: Provide a brief summary of major strengths of study (e.g., sample size; methodological approach). Please be brief 1-3 sentences, maximum.

Limitations: Provide a brief summary of major limitations (e.g., biases). Please be brief 1-3 sentences, maximum.
Pharmaceutical Interventions

Convalescent plasma treatment of severe COVID-19: A matched control study

22 MAY 2020 — medRxiv. Liu et al.

Our take —
In this small, single-center study posted as a non-peer-reviewed preprint, use of convalescent plasma was associated with improved survival and reduced supplemental oxygen demands when compared to retrospectively-collected propensity-matched controls. Because this study lacked randomization and thus there may have been unobserved differences in baseline characteristics between the plasma and comparison groups, data that take advantage of random assignment of convalescent plasma, or a strong non-experimental study design, are needed to verify the findings.

Study design
Retrospective Cohort

Study population and setting
This study included 45 hospitalized COVID-19 patients from an
Questions?