Structured expert judgement of COVID-19

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```
library(jsonlite)
dat <- from JSON ("https://connect.medrxiv.org/relate/collection_json.php?grp=181")[[3]] # All COVID-19 p
rels <- data.frame()</pre>
for(i in 1:nrow(dat)) {
  tmp <- dat$rel_authors[[i]]</pre>
  tmp <- merge(tmp, dat[i, colnames(dat) != "rel_authors"])</pre>
  rels <- rbind(rels, tmp)</pre>
}
rels$author_inst_short <- substr(rels$author_inst,1,45)</pre>
cat("MedRxiv and BioRxiv contain", nrow(dat), "articles and those have", length(unique(rels$author_name
## MedRxiv and BioRxiv contain 2056 articles and those have 13749 distinct authors ( 8.273833 on averag
auth <- aggregate(rels$author_name, by = rels[c("author_name", "author_inst_short")], FUN=length)
cat("Frequencies of authors by number of publications in MedRxiv or BioRxiv\n")
## Frequencies of authors by number of publications in MedRxiv or BioRxiv
table(auth$x)
##
##
                                5
             2
                   3
                          4
                                      6
                                            7
                                                              10
                                                                    14
       1
## 14360
                 150
                               18
                                                                     1
#auth <- merge(auth[auth$x>4 , ], rels)
auth[order(-auth$x),c(3,1,2)][1:100,]
##
                        author_name
                                                                 author_inst_short
          x
## 4810
         14
                   Gerardo Chowell Georgia State University School of Public Hea
## 3478
                    Hyeong Sik Ahn Department of Preventive Medicine, Korea Univ
## 7063
                    Myeong Soo Lee Korea Institute of Oriental Medicine, Daejeon
         10
                    Toshio Fukuoka Emergency and Critical Care Center, the Depar
## 4117
          9
## 5329
          9
                  Hiroshi Nishiura
                                                               Hokkaido University
## 7104
                    Kenji Mizumoto
                                                                  Kyoto University
          9
## 4299
                         Yanfang Ma Evidence-based Medicine Center, School of Bas
## 5191
                                        Harvard T.H. Chan School of Public Health
          8
                     Marc Lipsitch
## 7329
                   Rosalind M Eggo
                                    London School of Hygiene & Tropical Medicine
## 11681 8
                Benjamin J Cowling
                                                       The University of Hong Kong
## 11415
                            Qi Zhou The First School of Clinical Medicine, Lanzho
## 11449
                                             The Hong Kong Polytechnic University
                          Lin Yang
## 1666
                           Shi Zhao
                                                   Chinese University of Hong Kong
```

| ## | 5325 | 6 | Andrei R. Akhmetzhanov | Hokkaido University |
|----|--------------|---|----------------------------------|---|
| | 5342 | 6 | Daihai He | Hong Kong Polytechnic University |
| | 5351 | 6 | Yijun Lou | Hong Kong Polytechnic University |
| | 6176 | 6 | • | Institute of Laboratory Animal Science, Chine |
| | 7315 | 6 | | London School of Hygiene & Tropical Medicine |
| | 8064 | 6 | | National Institute of Infectious Diseases, To |
| | 8065 | 6 | _ | National Institute of Infectious Diseases, To |
| | 9616 | 6 | | School of Public Health, Lanzhou University, |
| | 1762 | 5 | Dirk Pfeiffer | City University of Hong Kong |
| | 3073 | 5 | | Department of Medical Laboratory Center, Gene |
| | 3433 | 5 | | Department of Pediatric, Sichuan Provincial P |
| | 4303 | 5 | | Evidence-based Medicine Center, School of Bas |
| | 4582 | 5 | Hongjie Yu | Fudan University |
| | 5330 | 5 | Katsuma Hayashi | Hokkaido University |
| | 5334 | 5 | Ryo Kinoshita | Hokkaido University |
| | 5339 | 5 | Tetsuro Kobayashi | Hokkaido University |
| | 5340 | 5 | Yichi Yang | Hokkaido University |
| | 5352 | 5 | Zian Zhuang | Hong Kong Polytechnic University |
| | 6182 | 5 | 0 | Institute of Laboratory Animal Science, Chine |
| ## | 6186 | 5 | _ | Institute of Laboratory Animal Science, Chine |
| ## | 6195 | 5 | | Institute of Laboratory Animal Science, Chine |
| ## | 11737 | 5 | Yuguo Li | The University of Hong Kong |
| ## | 11786 | 5 | Lauren Ancel Meyers | The University of Texas at Austin |
| ## | 12715 | 5 | pierre magal | University of Bordeaux |
| ## | 13544 | 5 | Oliver Pybus | University of Oxford |
| ## | 13814 | 5 | Zhanwei Du | University of Texas at Austin |
| ## | 638 | 4 | Zhihua Liu | Beijing Normal University |
| ## | 1936 | 4 | Jingyue Ju | Columbia University |
| ## | 1959 | 4 | Shiv Kumar | Columbia University |
| ## | 1960 | 4 | Steffen Jockusch | Columbia University |
| ## | 1964 | 4 | Xiaoxu Li | Columbia University |
| ## | 3079 | 4 | Yueping Liu | Department of Medical Laboratory Center, Gene |
| ## | 3080 | 4 | | Department of Medical Laboratory Center, Gene |
| ## | 3691 | 4 | | Department of Respiratory Medicine, Children |
| | 3696 | 4 | | Department of Respiratory Medicine, Children |
| | 3700 | 4 | _ | Department of Respiratory Medicine, Children |
| | 4655 | 4 | XINMIAO FU | Fujian Normal University |
| | 4662 | 4 | Gang Chen | Fujian Provincial Hospital |
| | 4746 | 4 | | General Hospital of Central Theater Command o |
| | 4873 | 4 | _ | Guangdong Provincial Center for Disease Contr |
| | 4887 | 4 | _ | Guangdong Provincial Center for Disease Contr |
| | 5197 | 4 | Rebecca Kahn | |
| | 5333 | 4 | Natalie M. Linton | Hokkaido University |
| | 5443 | 4 | Weiming Wang Michael Famulare | Huaiyin Normal University |
| | 5984 6152 | 4 | | Institute for Disease Modeling |
| | 6160 | 4 | _ | Institute of Hydromechanics National Academy |
| | 6184 | 4 | _ | Institute of Immunology, PLA, Third Military Institute of Laboratory Animal Science, Chine |
| | 6191 | 4 | | Institute of Laboratory Animal Science, Chine |
| | 6756 | 4 | _ | Johns Hopkins Bloomberg School of Public Heal |
| | 7370 | 4 | | London School of Hygiene and Tropical Medicin |
| | 7663 | 4 | Jonathan Dushoff | McMaster University |
| | 8066 | 4 | | National Institute of Infectious Diseases, To |
| | 8303 | 4 | Brandi Williamson | NIAID |
| | | | | |

```
## 8332
                   Vincent Munster
                                                                               NIAID
## 8971
                                                               Princeton University
                      Sang Woo Park
## 9584
                         Hongjie Yu School of Public Health, Fudan University, Ke
## 9617
                       Yaolong Chen School of Public Health, Lanzhou University,
## 10507
                           Hua Qian
                                                               Southeast University
## 10529
                         Peihua Cao
                                                        Southern Medical University
## 10825
                             Yan Wu State Key Laboratory of Virology, Wuhan Insti
## 11416
                       Qianling Shi The First School of Clinical Medicine, Lanzho
## 13880
                     Ashleigh Tuite
                                                              University of Toronto
## 13887
                                                              University of Toronto
                       Isaac Bogoch
## 13978
                     Matt J Keeling
                                                              University of Warwick
## 14031
                                                           University of Washington
                      Meei-Li Huang
## 14096
          4
               Robert Kirchdoerfer
                                                   University of Wisconsin-Madison
## 18
          3
                     Final Decision
## 270
          3
                                                           Anhui Medical University
                      Fang-Fang Liu
## 272
          3
                           Hui Zhao
                                                           Anhui Medical University
## 273
          3
                     Hui-Xian Xiang
                                                           Anhui Medical University
## 274
          3
                            Jun Fei
                                                           Anhui Medical University
## 275
          3
                             Lin Fu
                                                           Anhui Medical University
## 277
          3
                        Meng-Die Li
                                                           Anhui Medical University
## 280
          3
                         Ying Xiang
                                                           Anhui Medical University
## 850
          3
                        Kamran Khan
## 1199
          3
                       Junko Kurita Center for Medical Sciences, Ibaraki Prefectu
## 1268
          3
                       Krista Queen
                                        Centers for Disease Control and Prevention
## 1292
                                        Centers for Disease Control and Prevention
          3
              Natalie J. Thornburg
## 1765
          3
                     Hsiang-Yu Yuan
                                                      City University of Hong Kong
## 1773
          3
                     Qingpeng Zhang
                                                      City University of Hong Kong
## 1926
          3
                      Chuanjuan Tao
                                                                Columbia University
## 1933
          3
                     James J. Russo
                                                                Columbia University
## 1948
          3
                      Minchen Chien
                                                                Columbia University
## 2344
          3
                       Marek Ochman Department of Cardiac, Vascular and Endovascu
## 2629
          3
                        Haidong Kan Department of Environmental Health, School of
## 2634
                       Weidong Wang Department of Environmental Health, School of
inst <- rels[!duplicated(rels[c("rel_doi", "author_inst_short")]) , ]</pre>
inst <- aggregate(inst$author_inst_short, by=inst["author_inst_short"], FUN=length)</pre>
cat("Frequencies of institutes by number of publications in MedRxiv or BioRxiv\n")
## Frequencies of institutes by number of publications in MedRxiv or BioRxiv
table(inst$x)
##
##
           2
                                      7
                                                9
                                                               12
                                                                               15
                                                                                    16
      1
                 3
                      4
                           5
                                6
                                           8
                                                    10
                                                          11
                                                                    13
                                                                          14
                          39
##
   4085
         429
              125
                     49
                               25
                                     11
                                           8
                                               15
                                                    10
                                                                6
                                                                     6
                                                                           5
                                                                                1
                                                                                     4
##
     18
          20
                     25
                               37
##
           1
                 1
                      1
                           1
#inst <- merge(inst[inst$x>10 , ], rels)
inst[order(-inst$x),c(2,1)][1:50,]
##
                                         author_inst_short
         х
## 4408 37
                                      University of Oxford
## 1
        34
## 3937 25
                              The University of Hong Kong
```

```
## 1688 23
                                        Fudan University
## 4504 20
                               University of Washington
## 3616 18
                                     Stanford University
## 2021 16
                                 Imperial College London
## 2562 16 London School of Hygiene and Tropical Medicin
## 3186 16
                     Renmin Hospital of Wuhan University
## 4814 16
                   Zhongnan Hospital of Wuhan University
## 1854 15
               Harvard T.H. Chan School of Public Health
## 1749 14 Georgia State University School of Public Hea
## 4009 14
                                     Tsinghua University
## 4362 14
                                  University of Michigan
## 4467 14
                           University of Texas at Austin
## 4482 14
                                   University of Toronto
## 2
        13
## 631 13
                                     Columbia University
## 1949 13 Huazhong University of Science and Technology
## 3107 13
                                    Princeton University
## 4270 13
                                 University of Cambridge
## 4767 13
                                         Yale University
## 573 12
                            City University of Hong Kong
## 1259 12 Department of Preventive Medicine, Korea Univ
## 1857 12
                                      Harvard University
## 3689 12
                                  Sun Yat-sen University
## 4417 12
                              University of Pennsylvania
## 4711 12
                               Xi'an Jiaotong University
## 916 11 Department of Epidemiology and Biostatistics,
## 1327 11 Department of Respiratory and Critical Care M
## 1996 11
                 Icahn School of Medicine at Mount Sinai
## 2522 11
                                      Lanzhou University
          London School of Hygiene & Tropical Medicine
## 2561 11
## 4675 11 Wuhan Institute of Virology, Chinese Academy
## 228
       10
                               Beijing Normal University
## 1531 10
          Emergency and Critical Care Center, the Depar
## 1845 10
                                  Harvard Medical School
## 1907 10
                                     Hokkaido University
## 2443 10
                                   King's College London
## 2463 10 Korea Institute of Oriental Medicine, Daejeon
## 2623 10
                          Massachusetts General Hospital
## 3594 10
                                    Southeast University
## 3773 10
                     The Chinese University of Hong Kong
## 4059 10 Union Hospital, Tongji Medical College, Huazh
## 541
                             Chinese Academy of Sciences
## 928
         9 Department of Epidemiology, School of Public
## 1581
        9 Evidence-based Medicine Center, School of Bas
## 1681
                  Fred Hutchinson Cancer Research Center
## 1909
        9
                        Hong Kong Polytechnic University
## 2481 9
                                        Kyoto University
```