# Skills Assessment

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# Introduction

Our team is here to provide you with the final analysis to aid with the development of therapeutics to treat the parasitic disease, Schistosomiasis.

Alex - Highlighting the most active researchers.

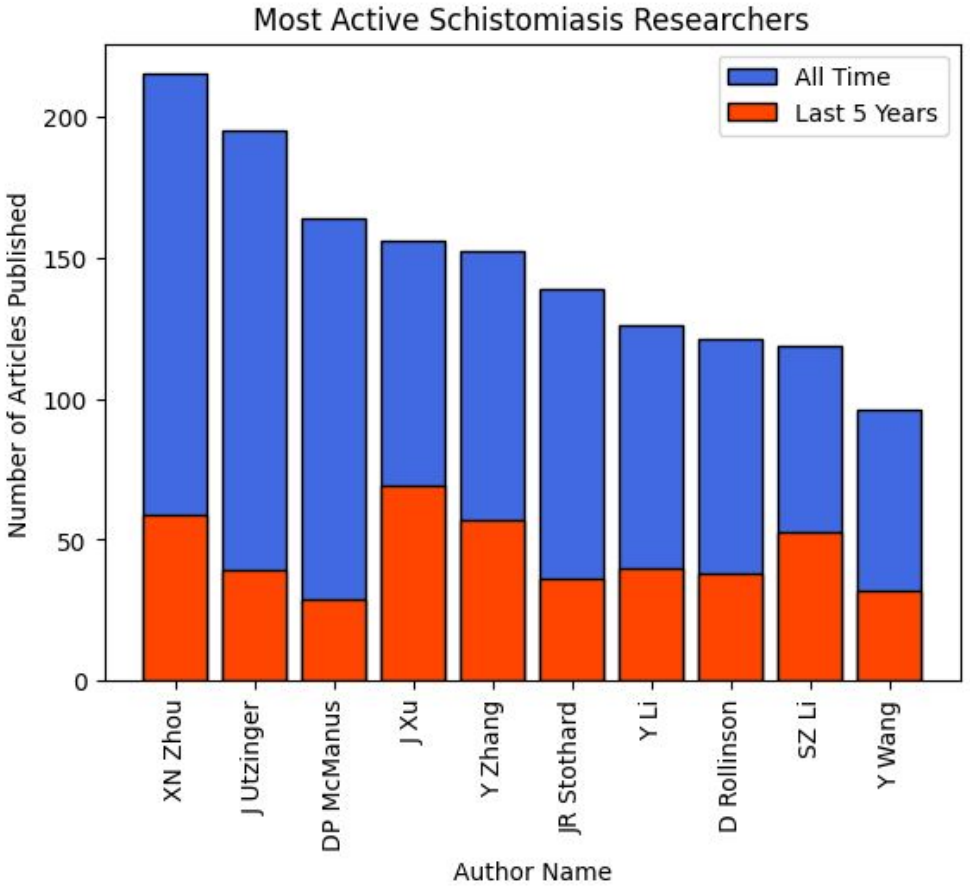
Yathin - Giving a detailed analysis of multiple network graphs.

KP - Giving analysis into the most important publishing journals in the field.

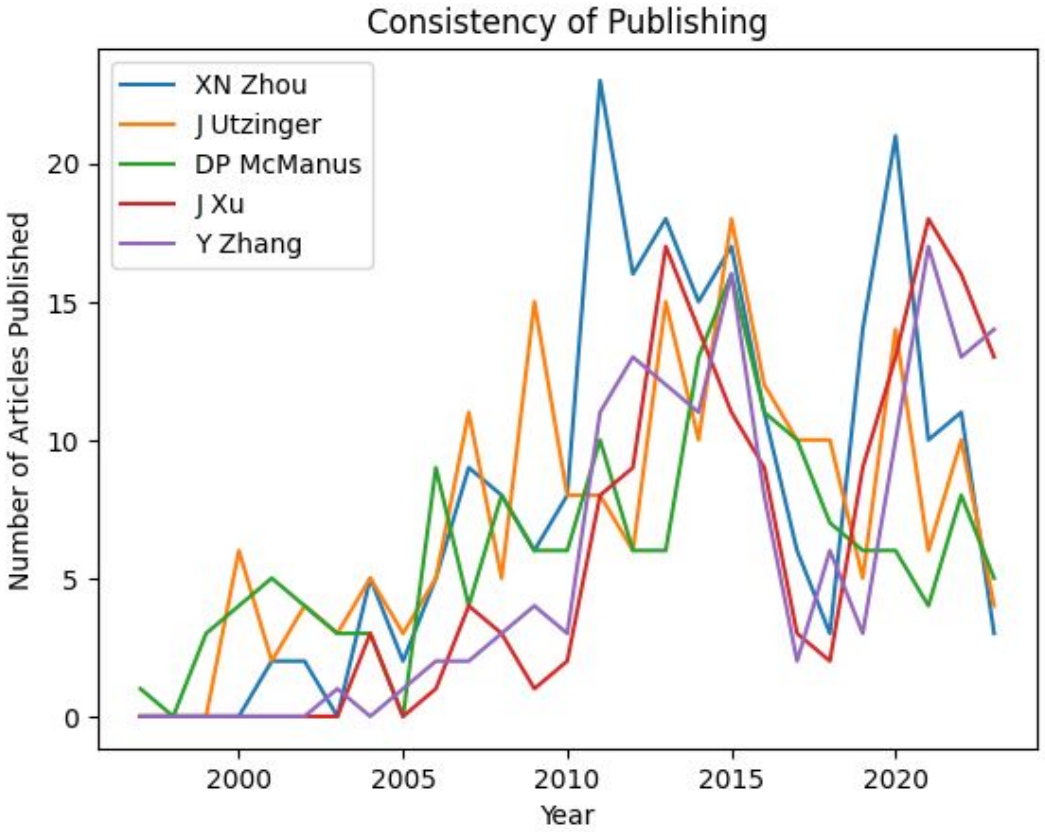
Liu - Providing country and year wise analysis..

# Determining the Most Active Researchers

- By counting the number of times each unique author appeared, the highest ranking authors in terms of number of publications can be displayed
- By this metric, XN Zhou is the most active researcher in this field with a total of 215 articles published
- The number of papers each of these authors published in the last 5 years is also displayed for additional context
- XN Zhou maintained an impressive rate of publication over the last 5 years, while some competing authors experienced a drop off

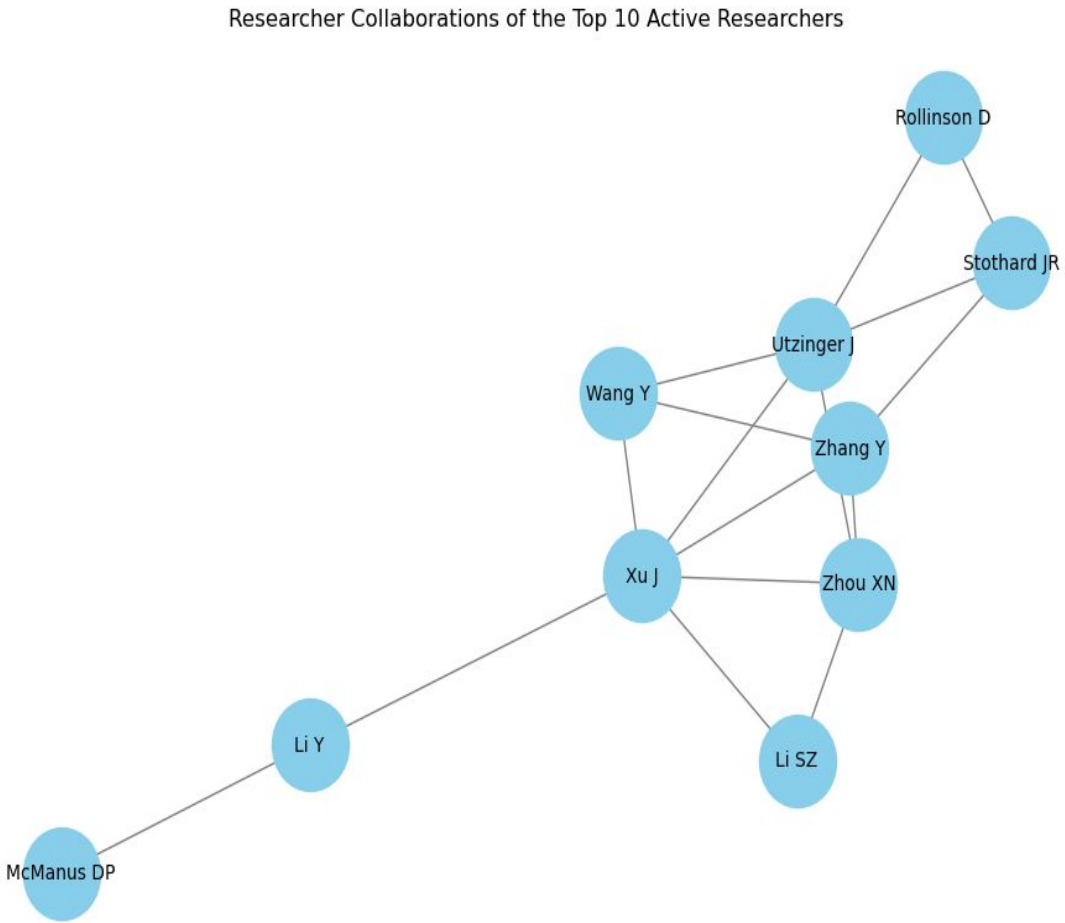


# Further Investigation into the Most Active Researchers



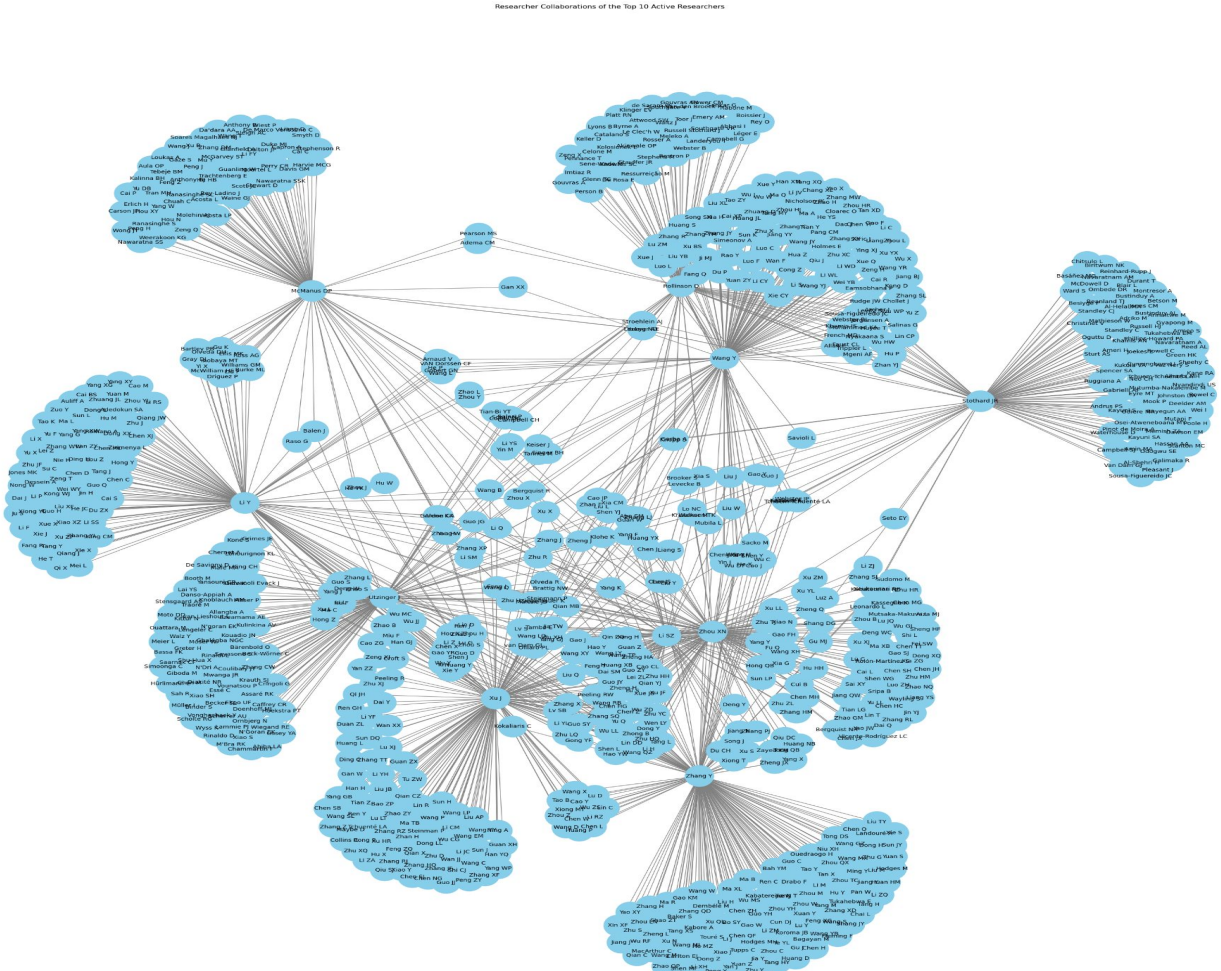

- The number of papers published each year by the top 5 most active authors (in terms of all time publications) are displayed by the graph
- XN Zhou and J Xu have published many papers in a relatively short period of time, whereas Utzinger and McManus have published at a steadier rate
- External factors are likely responsible for coinciding peaks and dips

# Collaboration Network Graph



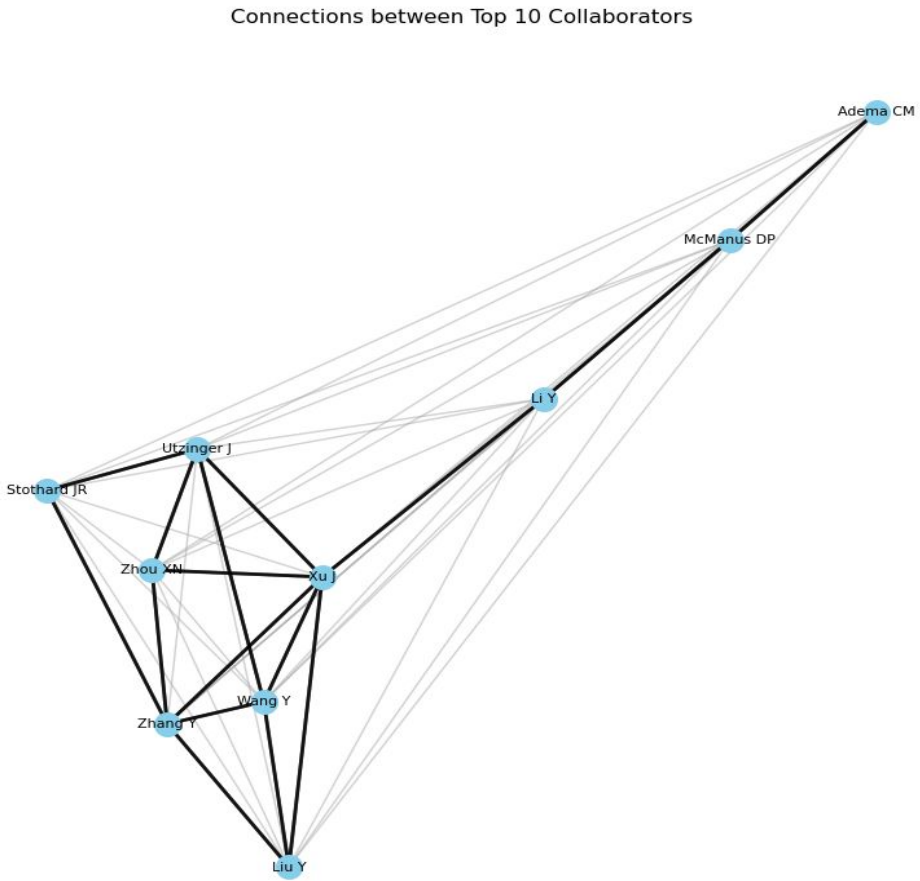

- These are the top 10 active researchers and their connections with each other.
- Xu J is the most connected with other top 10 researchers, he has published a total of 156 articles.

# Research Collaboration of Top 10 Active Authors



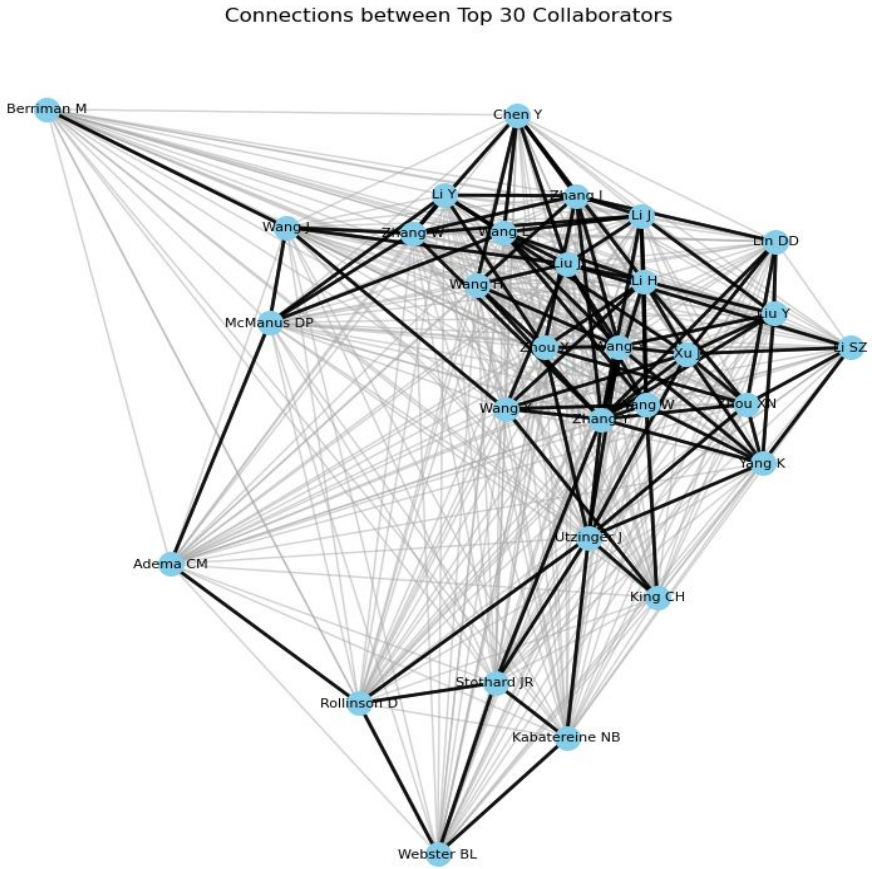

- The graph shows the top 10 most active researchers along with the researchers they have collaborated with.
- The nodes represents the researchers and the connection line represents the collaboration between the researchers.
- We also provide a visualisation in a live environment

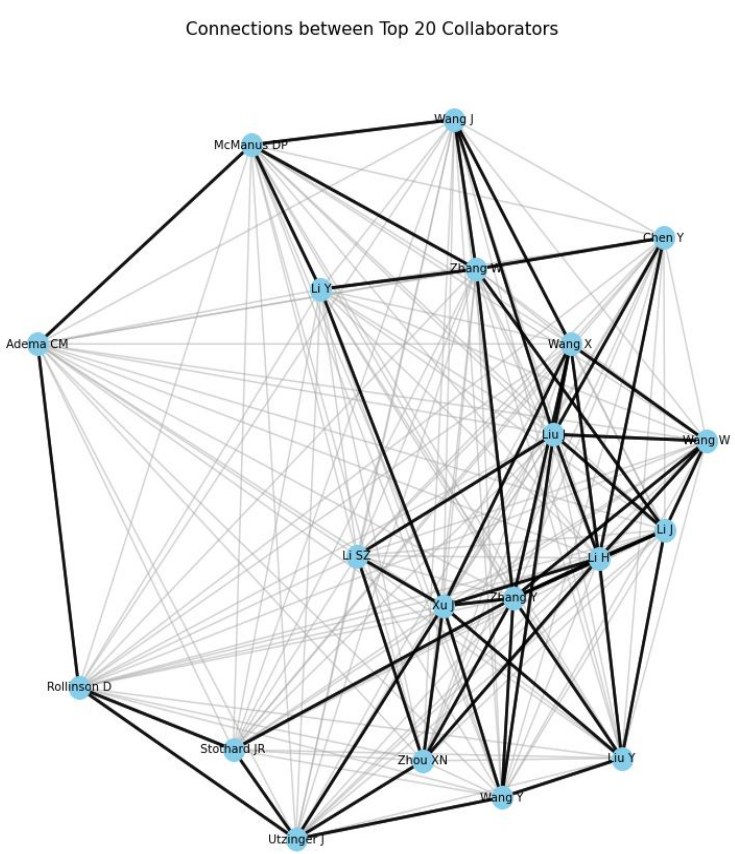
# Connections Between the Top Collaborators



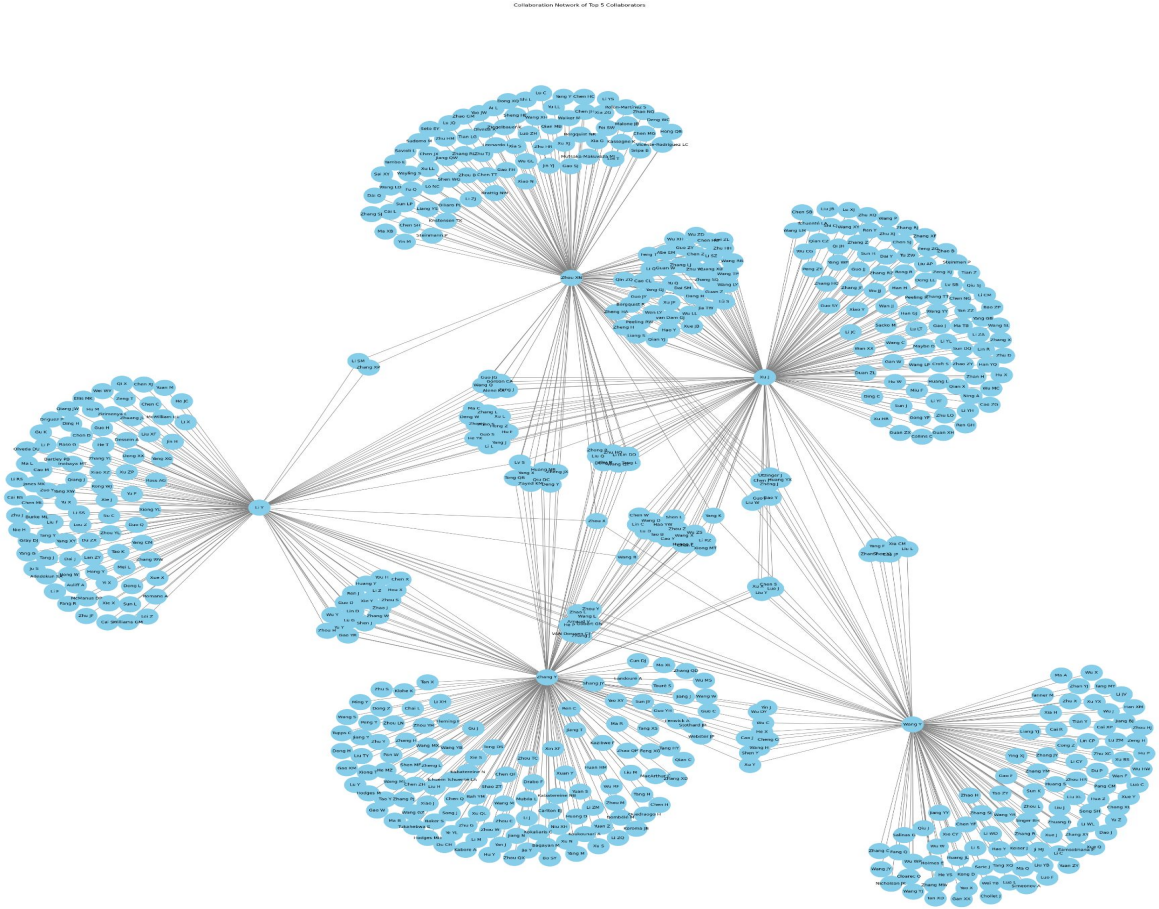

- Xu J has the highest number of collaborations with a total of 195 collaborations with other researchers in the field
- The second highest is Zhang Y with 189
- The thick line represents that they have collaborated on at least one paper together
- The thin line represents that researchers are not directly connected

# Top 20 and Top 30 Collaborators



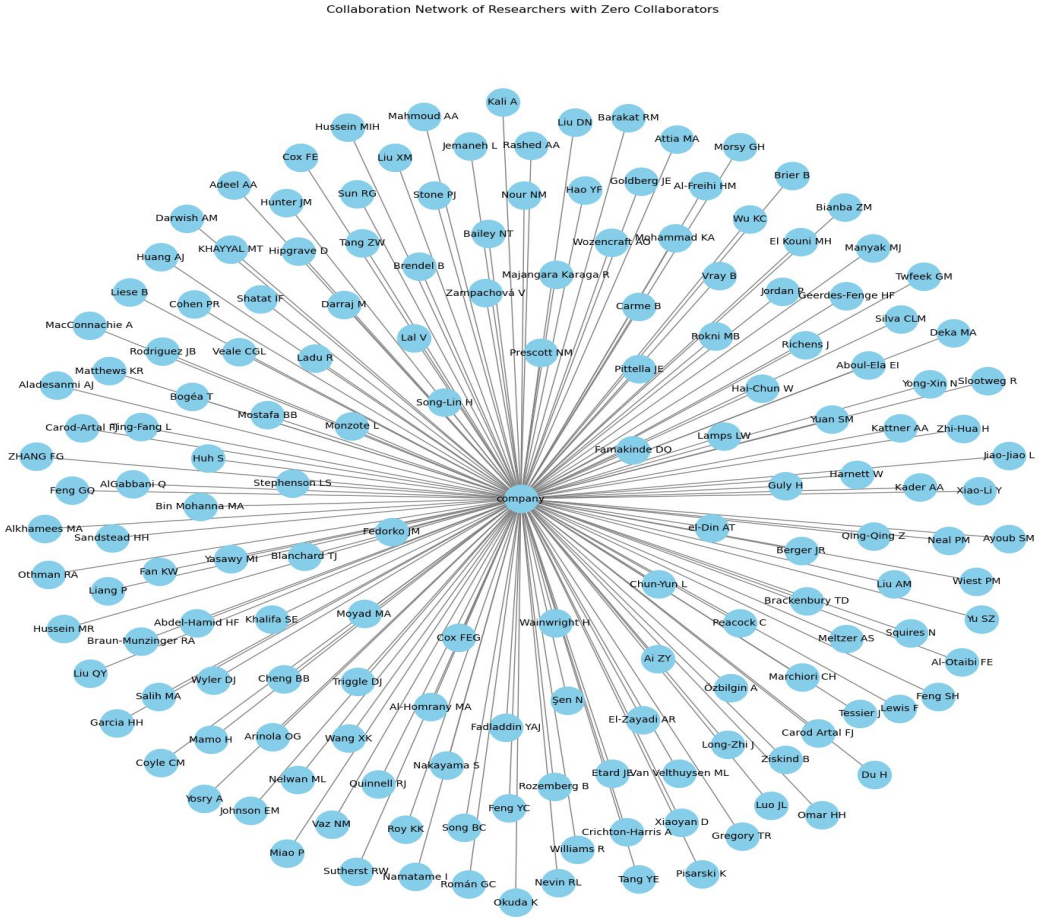



# Collaboration Network of Top 5 Collaborators



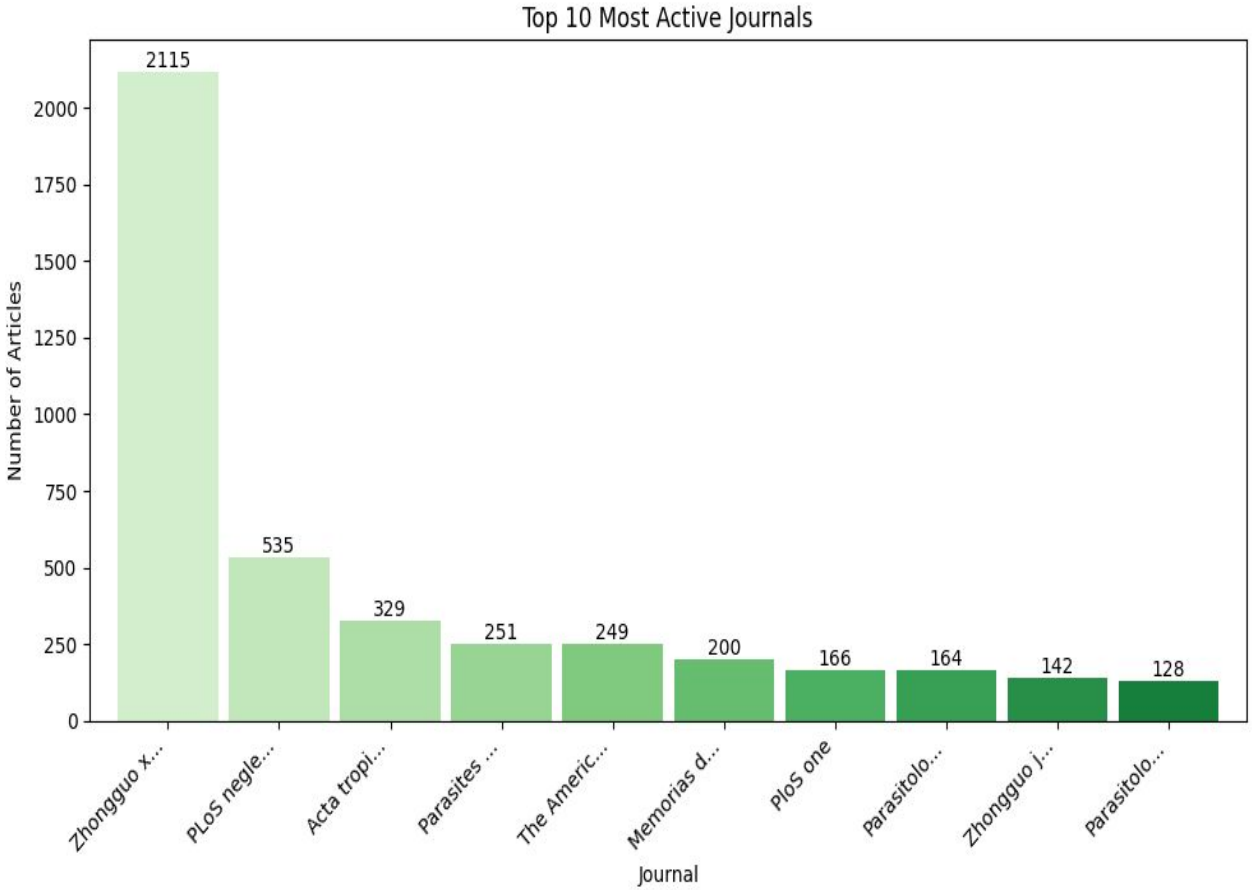

- We created a dataset of the researchers who are working with each other.
- Graph represents the top 5 collaborators along with the other researchers that they are working with.
- We also show the visualization in a live environment.

# Collaboration Network of Researchers with Zero Collaborator




- There are total 162 researchers who are not collaborated with other researchers.
- The nodes represent the researchers who have worked alone on papers
- Company can look at the researchers who are not in collaboration with other researchers

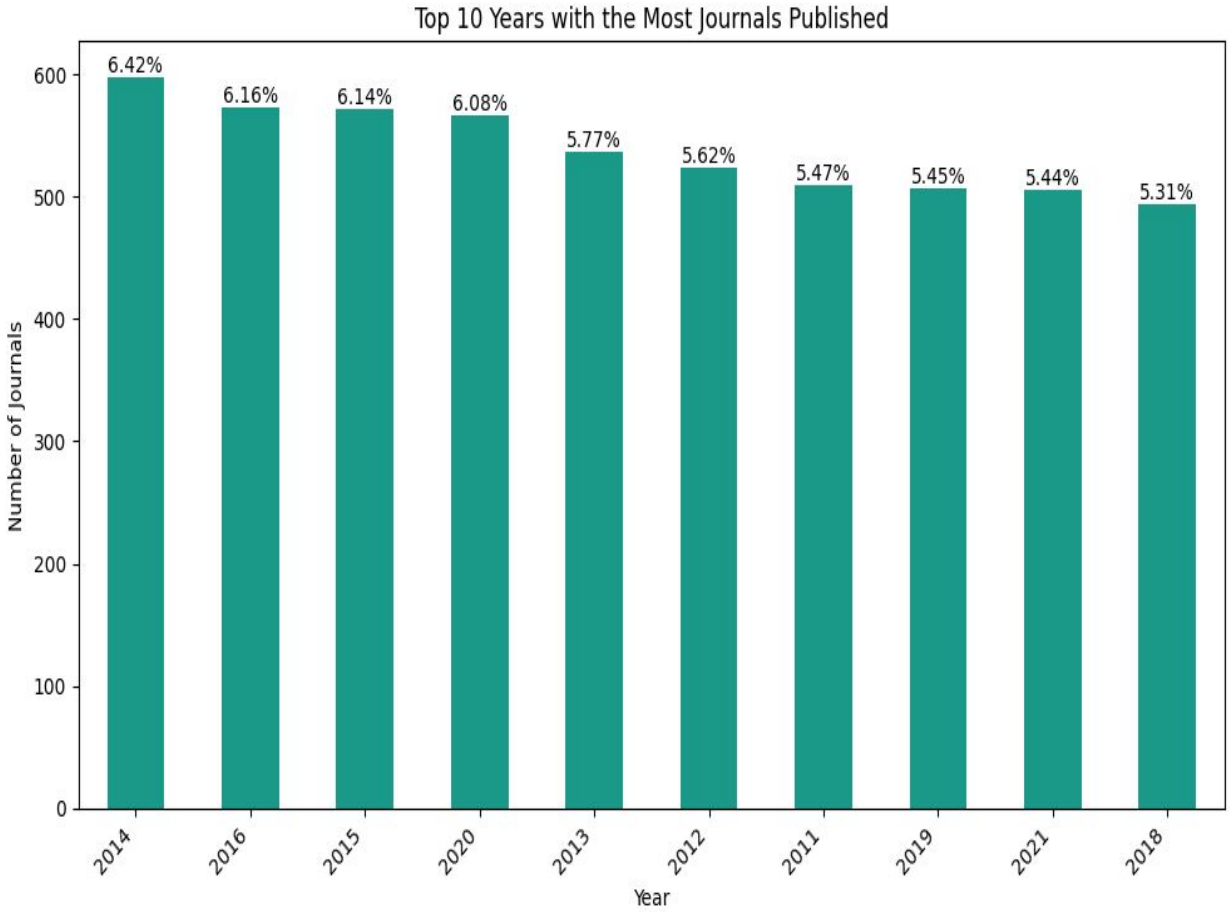
# Most Active Journal




- A graphic representation for the most active journal of all time in this field, shows that **Zhongguo xue xi chong bing fang zhi za zhi = Chinese journal of schistosomiasis control** is the most active with 2115 publications.

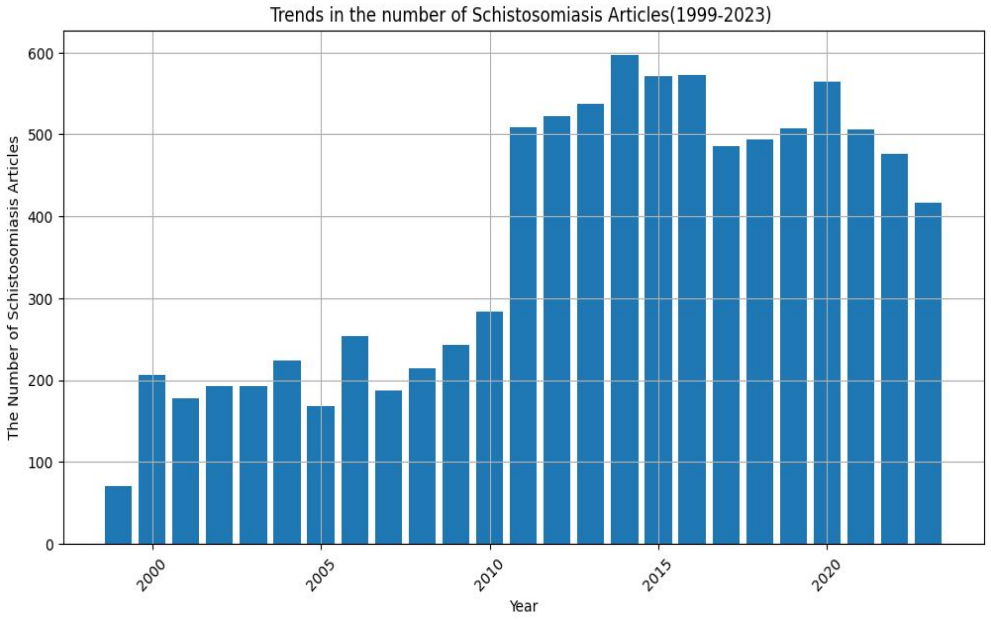
- This analysis of journals over the years, gives a good insight into which journals are the most suited to research regarding the disease.

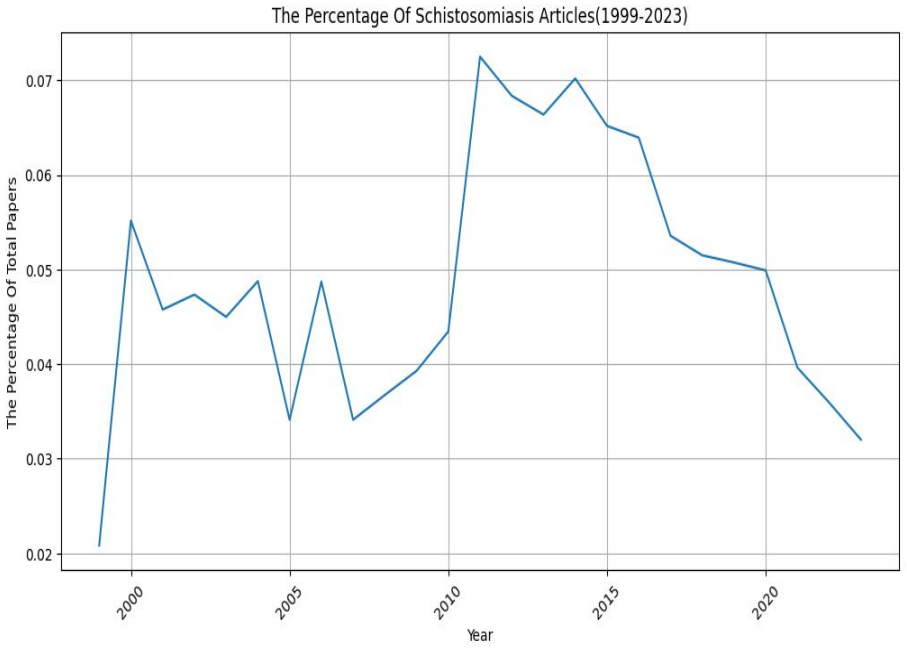
# Year-wise Description




- We analysed top 10 publication of journals year wise. 2014 holds the maximum percentage of journal articles published, with 2018 being the least.
- This graphic representation of yearly percentage is calculated over the entire dataset and provides us with an indication of the state of the field in each year

# Development in the Field of Schistosomiasis



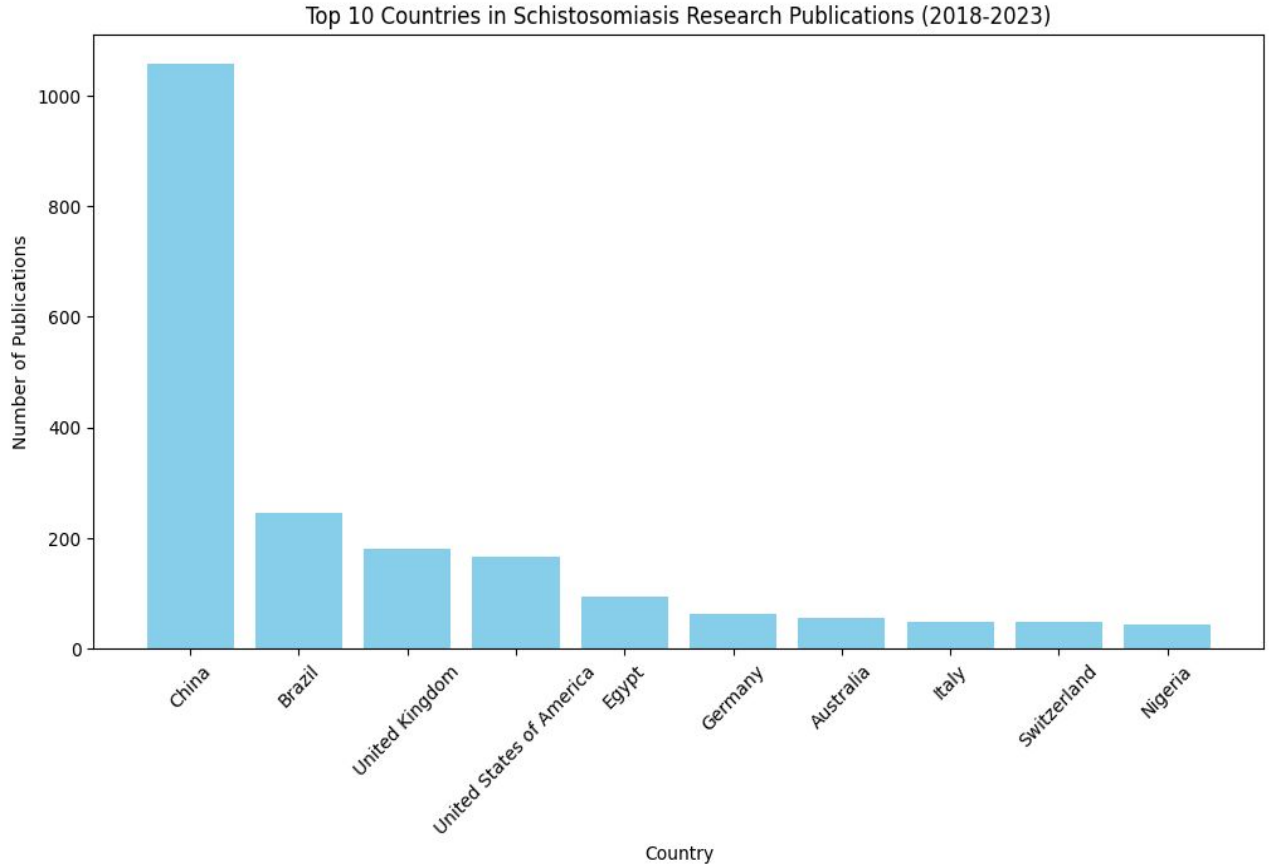




The years experienced the most significant increase:  2000 and 2011  decrease:  2017 and 2021

Decrease: 1. Successful management : The World Health Organization (WHO) has renewed its efforts in the fight against Neglected Tropical Diseases（NTDs）

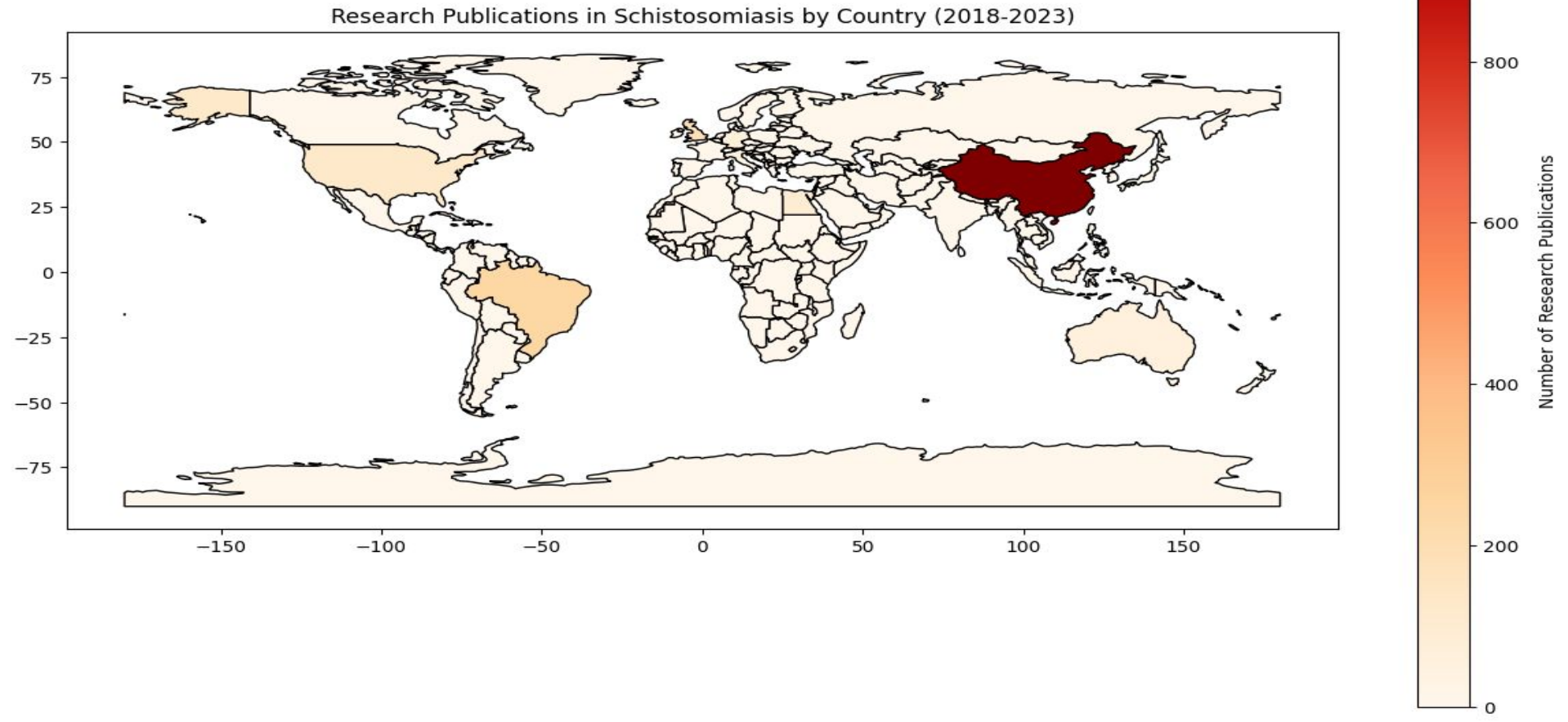
2.Shifts in global health priorities:The COVID-19 resulted in the suspension of large-scale drug management programs and interrupted global vector control.

# Top 10 Countries in Schistosomiasis Research Publication(2018 - 2023)




| Country | Publication |
|---|---|
| China | 1057 |
| Brazil | 245 |
| United Kingdom | 181 |
| United States of America | 166 |
| Egypt | 93 |
| Germany | 62 |
| Australia | 56 |
| Italy | 48 |
| Switzerland | 48 |
| Nigeria | 44 |

# Country-Wise representation of the Research Publications



# Summary

- The researchers we recommend working with are XN Zhou, J Utzinger and J Xu as they are the most active researchers considering all time publications as well as publications in the last 5 years.
- These researchers have collaborated with 151, 123 and 195 other researchers respectively and have all collaborated with each other on at least one paper.
- Zhongguo xue xi chong bing fang zhi za zhi = Chinese journal of schistosomiasis control is the most active journal overall and has published 2115 articles.
- To summarise our country wise analysis, China is the most active country with 1057 publications followed by Brazil with 245
- The two reasons for the decreasing amount of publications in the last 5 years:
    1. The World Health Organization (WHO) has renewed its efforts in the fight against Neglected Tropical Diseases (NTDs) by recently revising its road- map for NTDs 2021-2030 to achieve sustainable development goals (SDGs) [Dec,2020]
    2. COVID-19 resulted in the suspension of large-scale drug management programs and interrupted global vector control.[2022]

# Thank You for Listening