# Skin Cancer Origin using $CO_2$, Global Population and Life Expectancy

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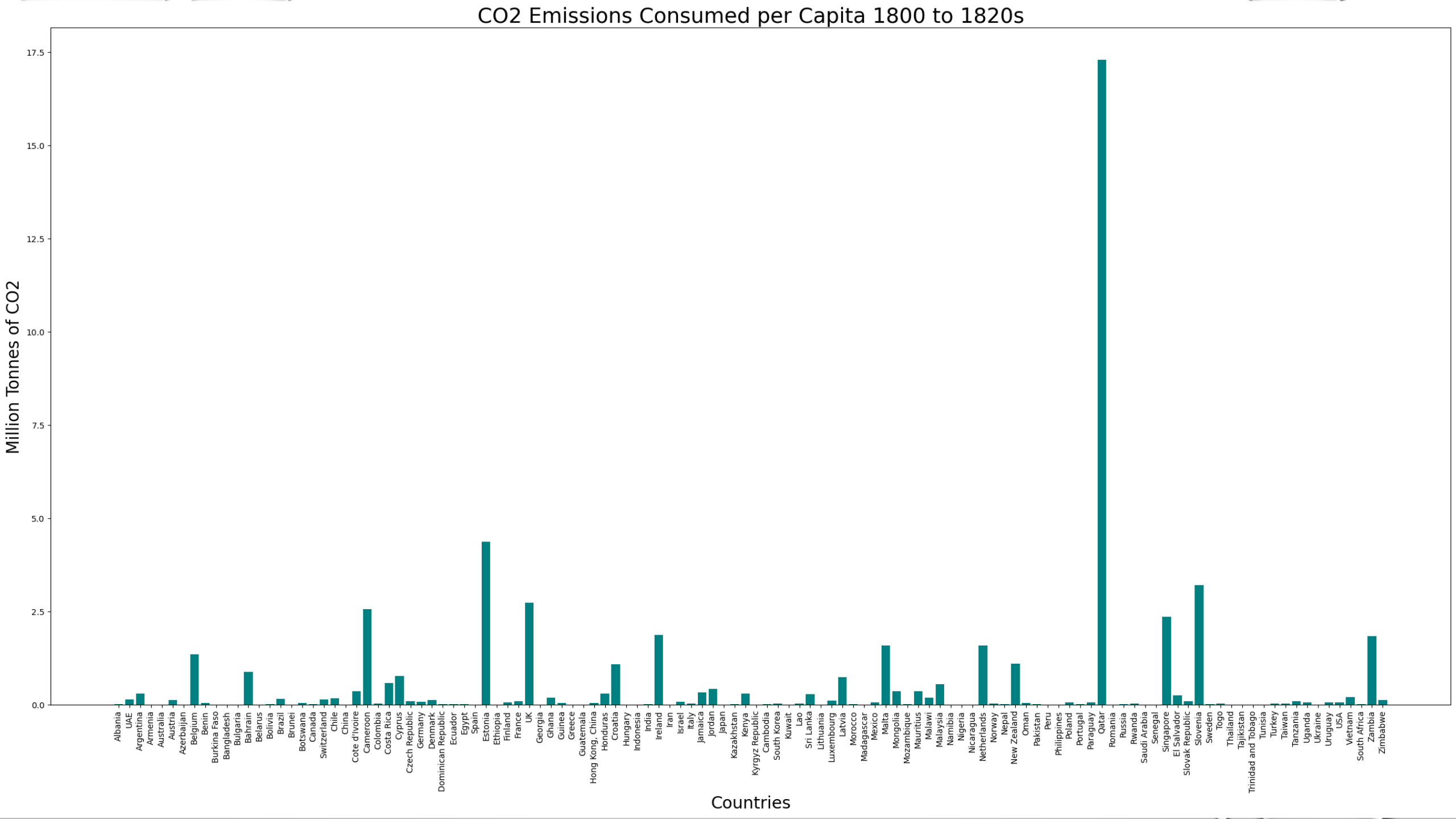
# Problem Statement

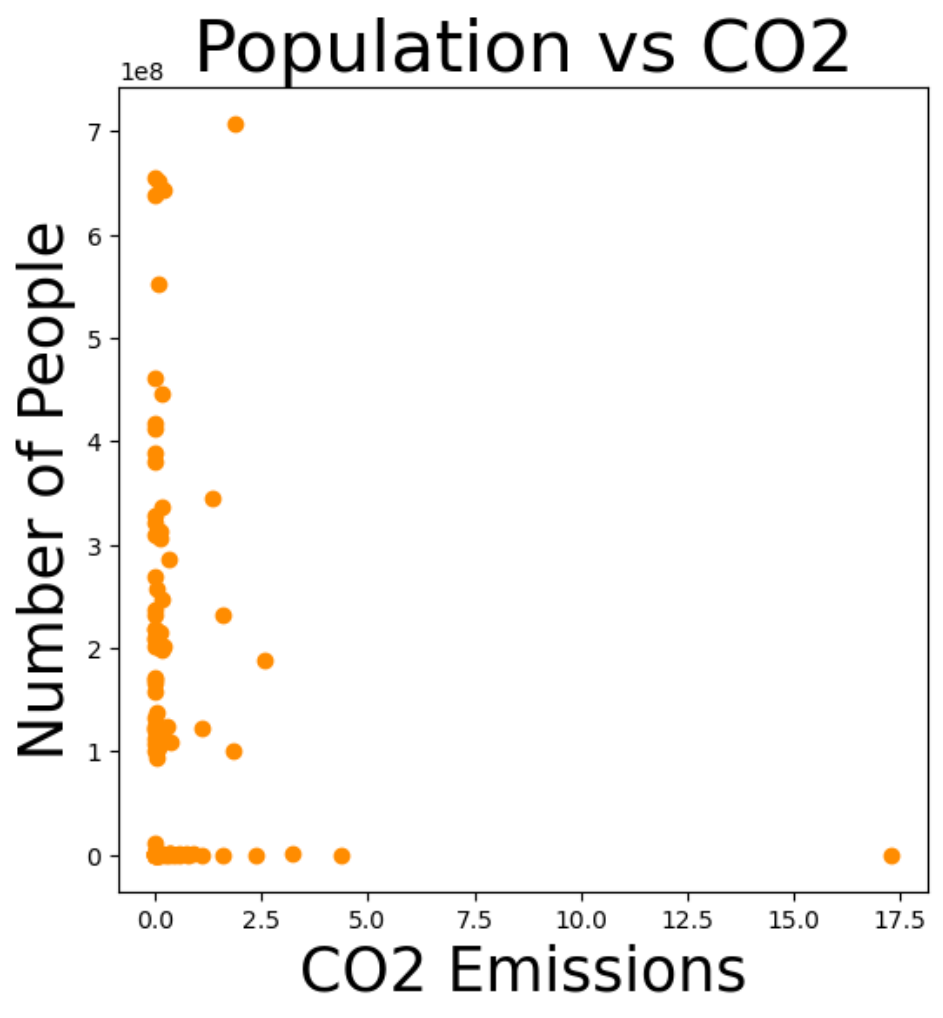
Researchers are investigating the origins of skin cancer and they must track when the ozone layer started to deteriorate. Carbon dioxide emissions are known to be harmful to the earth's atmosphere and usually spoken of regarding climate change, life expectancy and population fluctuations. The objective of this project are to find out which countries were the highest emitters of carbon dioxide at the earliest stages when carbon emissions came about. According to Gapminder's data, the earliest records of carbon dioxide emissions is 1800.

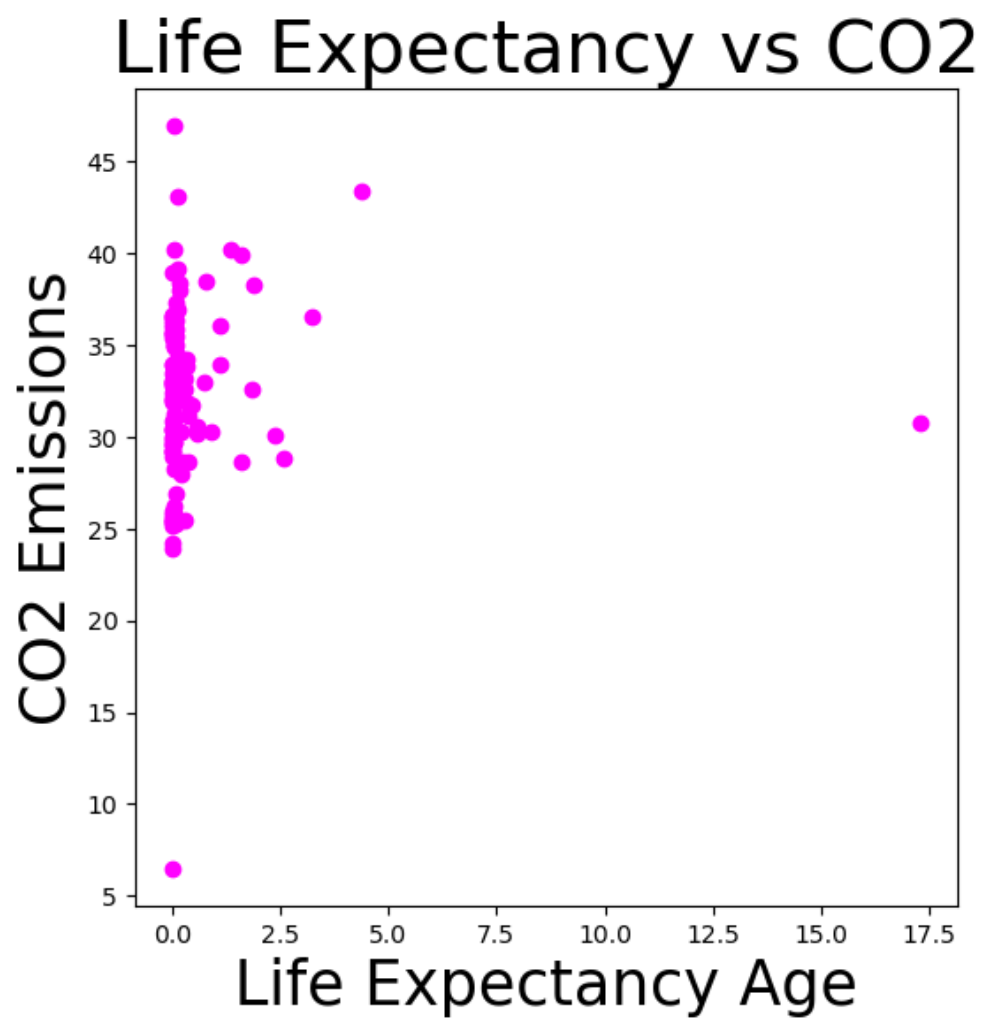
# DATA FINDINGS

If I was a researcher investigating the origins of carbon dioxide emissions and where the root of skin cancer may have evolved from, I would recommend starting in Qatar. According the data given, from 1800 to 1820 Qatar had the highest carbon dioxide emissions even though they are one the countries with the fewest population. Another interesting find is that the next two leading countries of carbon dioxide emissions were 10 to 12.5 million tonnes less than Qatar and the population of those countries were very similar. Now let me show you!


CO2 Emissions Consumed per Capita 1800 to 1820s
Million Tonnes of CO2
Countries
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
Albania
UAE
Argentina
Armenia
Australia
Austria
Azerbaijan
Belgium
Benin
Burkina Faso
Bangladesh
Bulgaria
Bahrain
Belarus
Bolivia
Brazil
Brunei
Botswana
Canada
Switzerland
Chile
China
Cote d'ivoire
Cameroon
Colombia
Costa Rica
Cyprus
Czech Republic
Germany
Denmark
Dominican Republic
Ecuador
Egypt
Spain
Estonia
Ethiopia
Finland
France
UK
Georgia
Ghana
Guinea
Greece
Guatemala
Hong Kong, China
Honduras
Croatia
Hungary
Indonesia
India
Ireland
Iran
Israel
Italy
Jamaica
Jordan
Japan
Kazakhstan
Kenya
Kyrgyz Republic
Cambodia
South Korea
Kuwait
Lao
Sri Lanka
Lithuania
Luxembourg
Latvia
Morocco
Madagascar
Mexico
Malta
Mongolia
Mozambique
Mauritius
Malawi
Malaysia
Namibia
Nigeria
Nicaragua
Netherlands
Norway
Nepal
New Zealand
Oman
Pakistan
Peru
Philippines
Poland
Portugal
Paraguay
Qatar
Romania
Russia
Rwanda
Saudi Arabia
Senegal
Singapore
El Salvador
Slovak Republic
Slovenia
Sweden
Togo
Thailand
Tajikistan
Trinidad and Tobago
Tunisia
Turkey
Taiwan
Tanzania
Uganda
Ukraine
Uruguay
USA
Vietnam
South Africa
Zambia
Zimbabwe

# CORRELATION?



# WHY? WHAT DOES THIS MEAN?

- Just to check if there was already a events happening, I put graphed a scatter plot to compare CO2 emissions with population, and CO2 emissions with life expectancy and there was no correlation. This means that the origin of skin cancer was most likely after the time frame of 1800 and 1820.

# CONCLUSION

- So how could we find a timeframe of possibly when sin cancer became prevalent? A way to find out when skin cancer started is to broaden our time using the same functions and see when CO2 emissions begins to correlate with life expectancy. We could also then cross examine the data to see which countries in the respectable time frame had the most carbon dioxide emissions and that could be a prime location to investigate skin cancer origination.