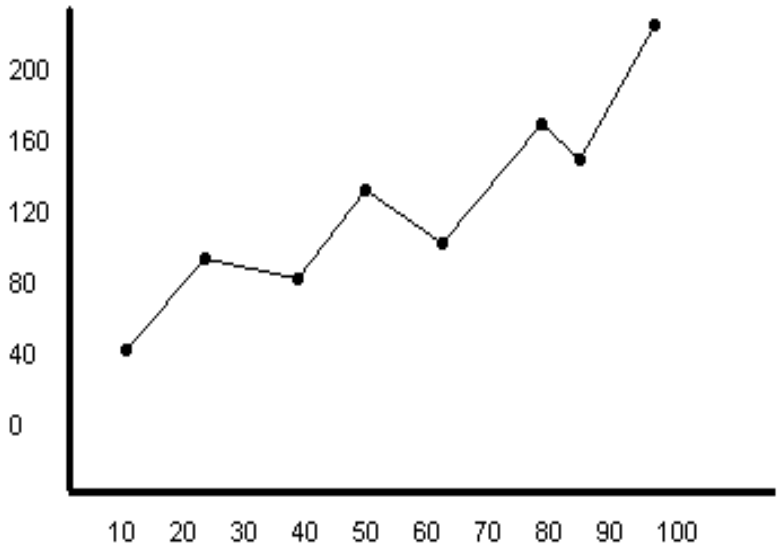
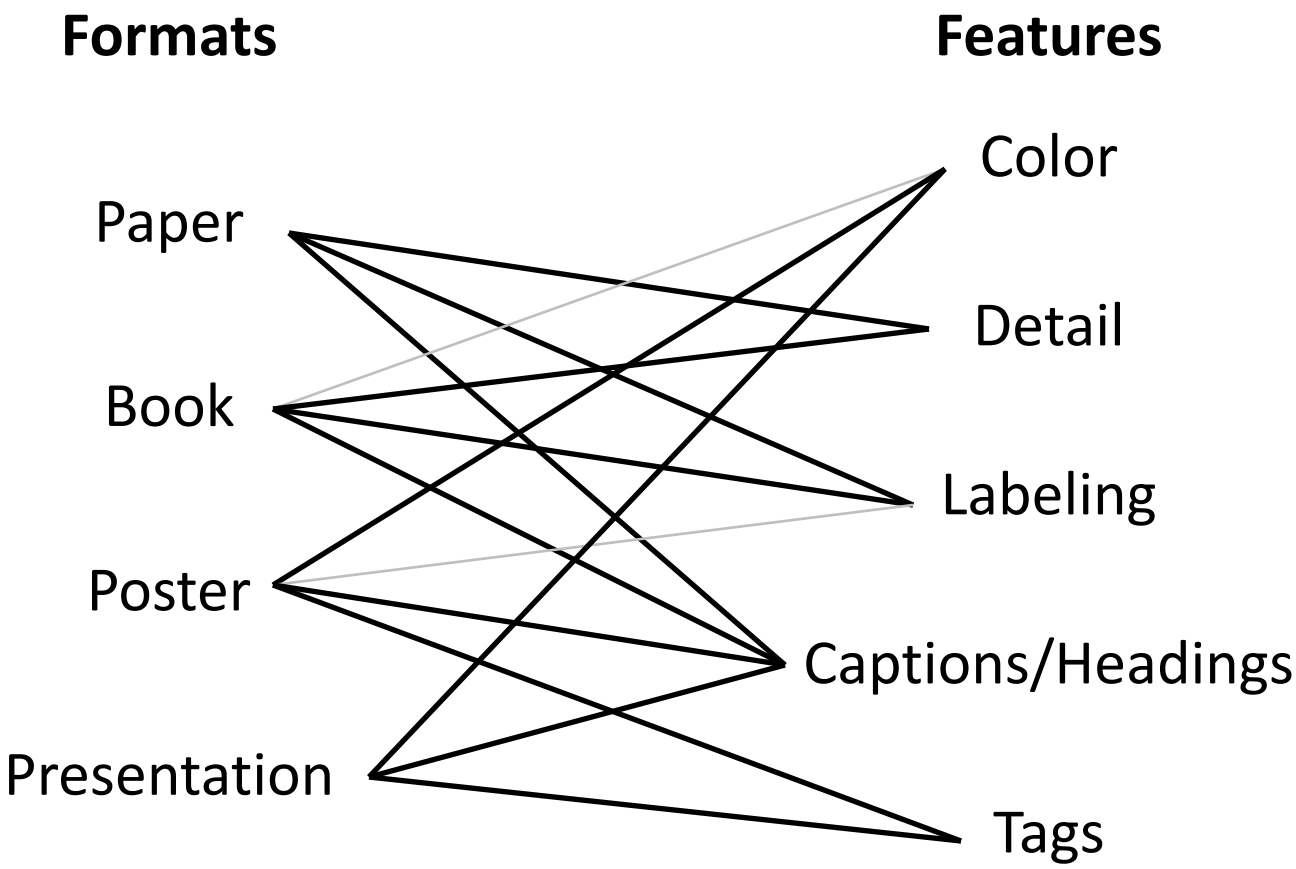
Charts & Tables

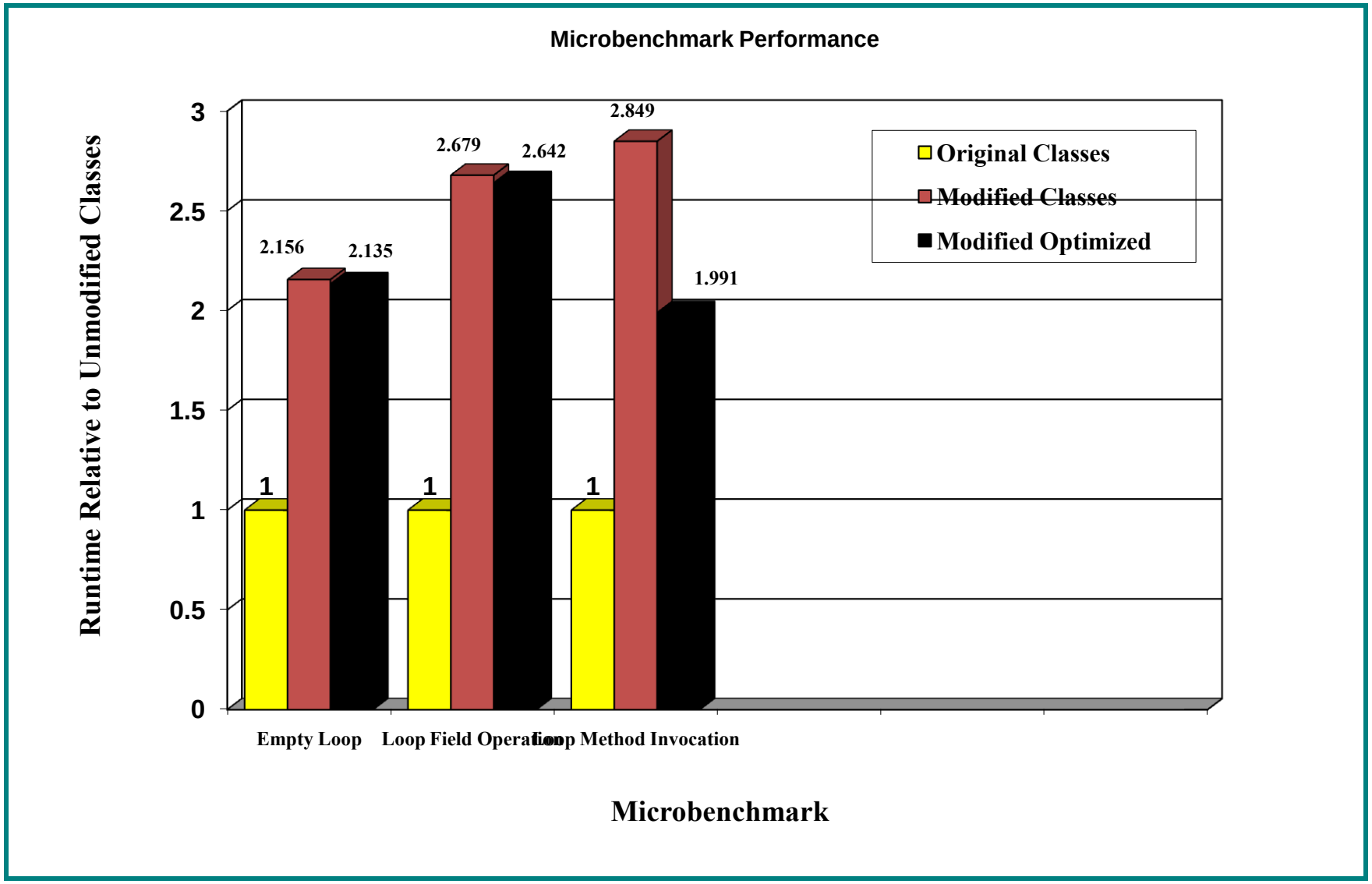
Some Issues

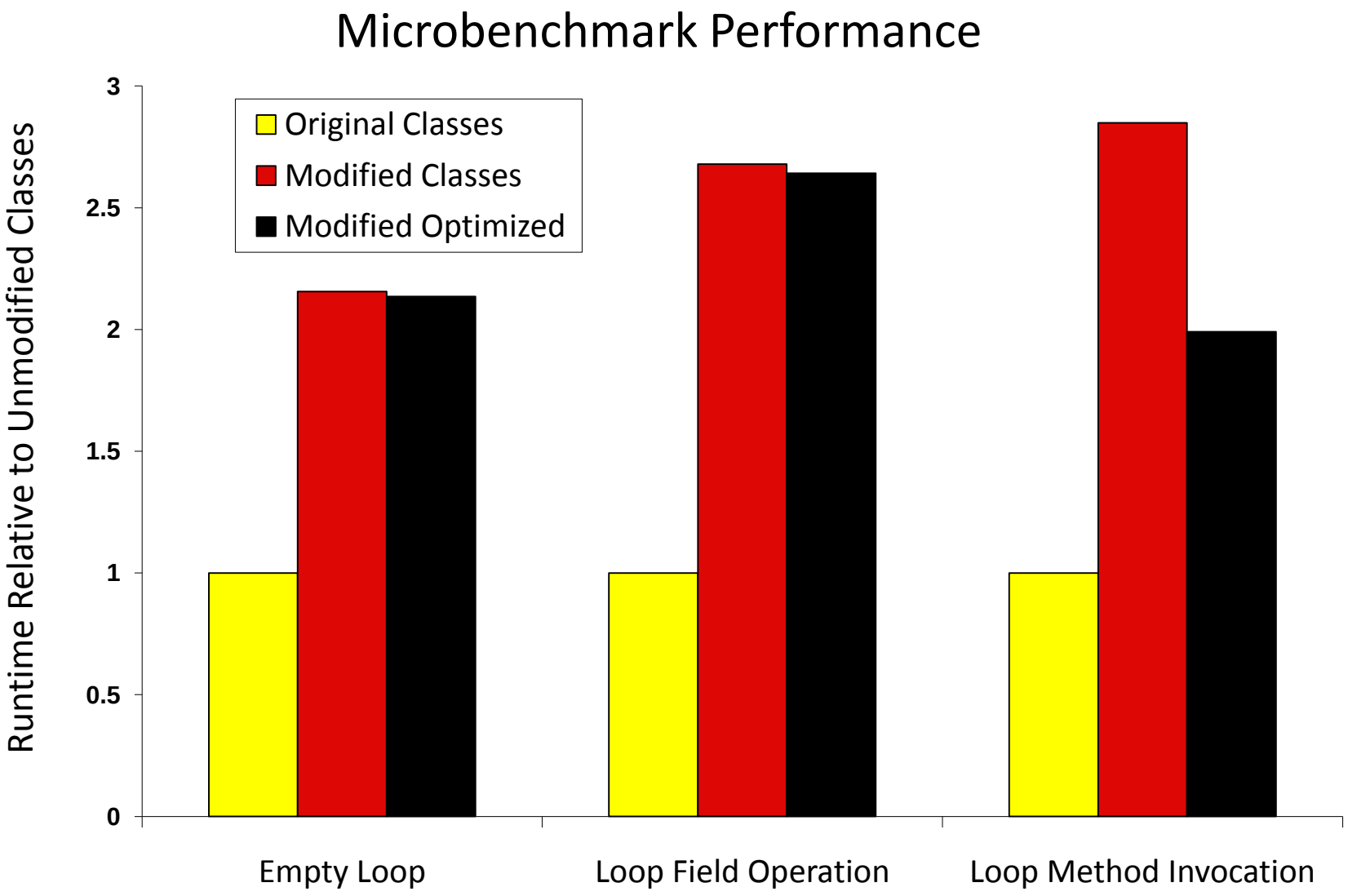
- Size
- Resolution
- Colors
- Labels
- Units
- Chart junk
- Continuous vs. discrete data
- Significant figures and error bars



Contexts


Formats
Features
Paper
Book
Poster
Presentation
Color
Detail
Labeling
Captions/Headings
Tags


Microbenchmark Performance
Runtime Relative to Unmodified Classes
3
2.5
2
1.5
1
0.5
0
2.156
2.135
2.679
2.642
2.849
1.991
1
1
1
Original Classes
Modified Classes
Modified Optimized
Empty Loop
Loop Field Operation
Loop Method Invocation
Microbenchmark


Microbenchmark Performance
Runtime Relative to Unmodified Classes
3
2.5
2
1.5
1
0.5
0
Original Classes
Modified Classes
Modified Optimized
Empty Loop
Loop Field Operation
Loop Method Invocation

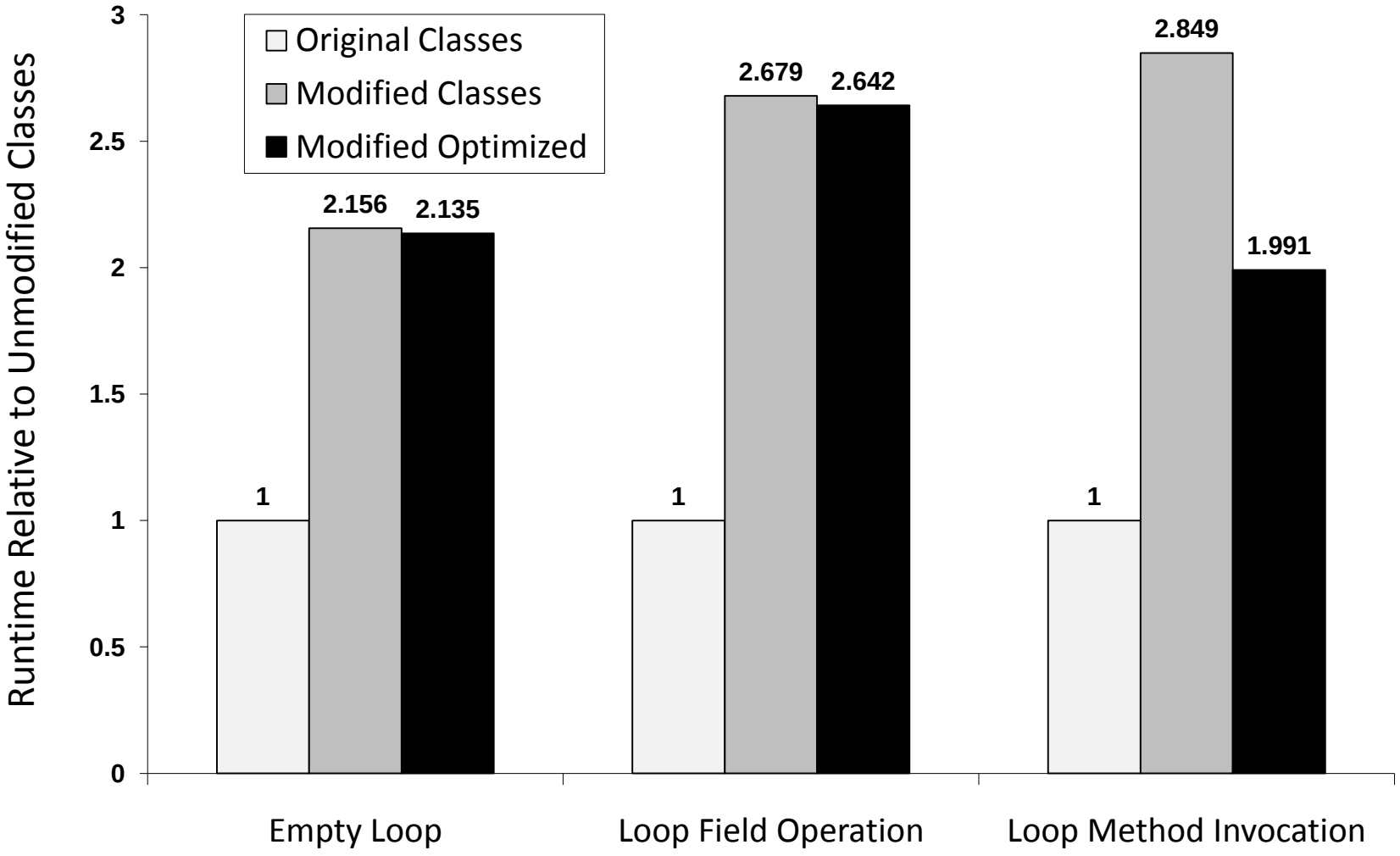
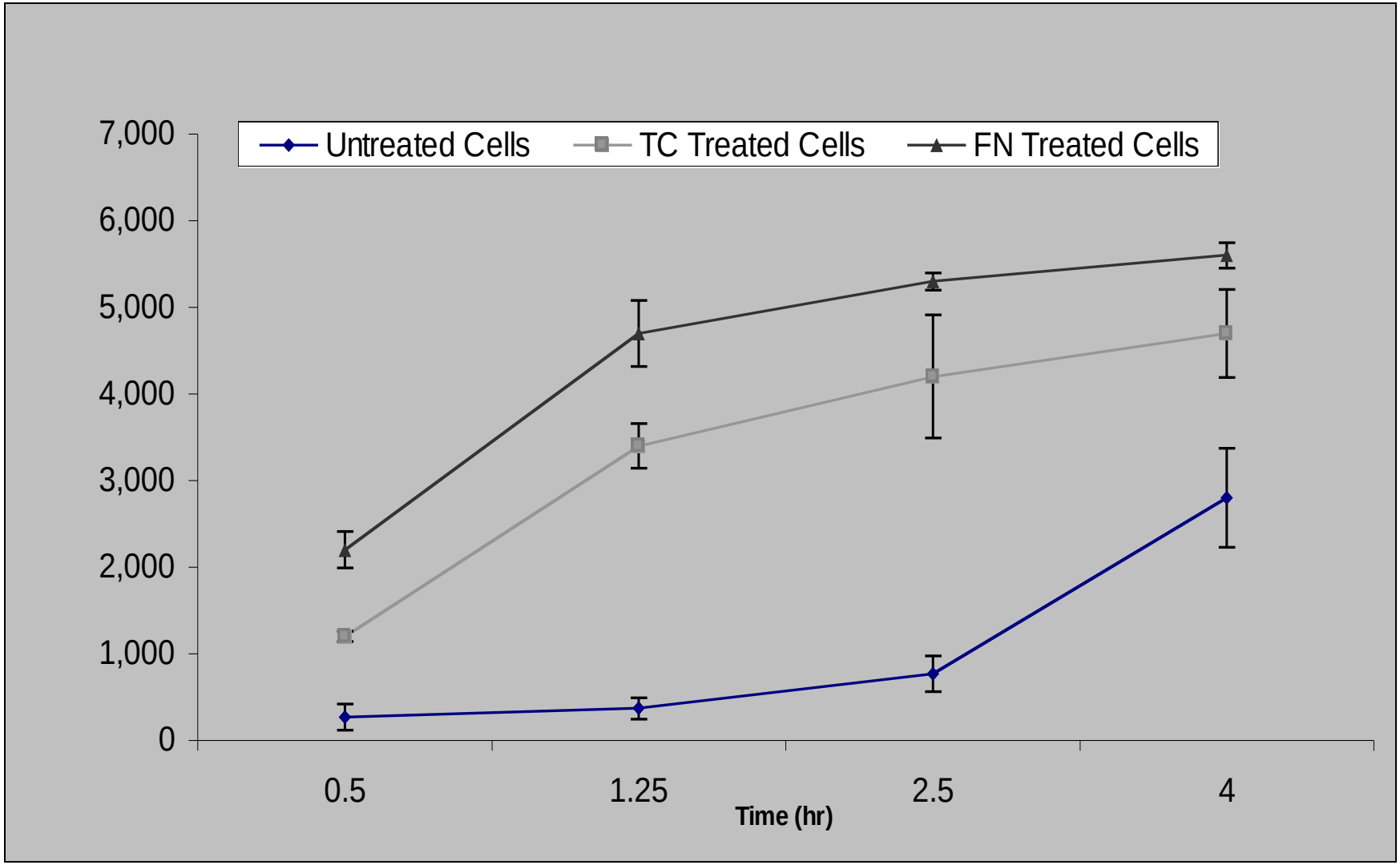
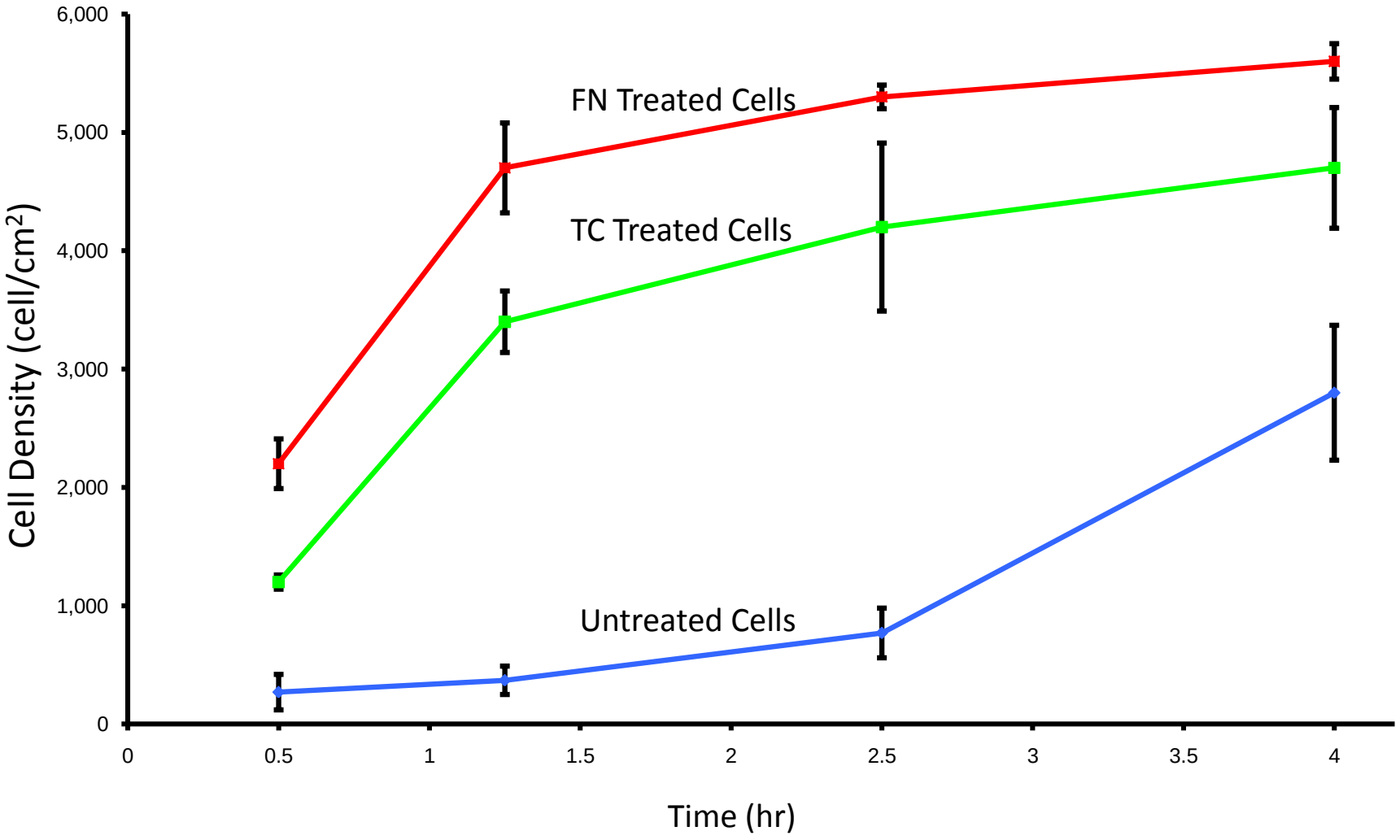
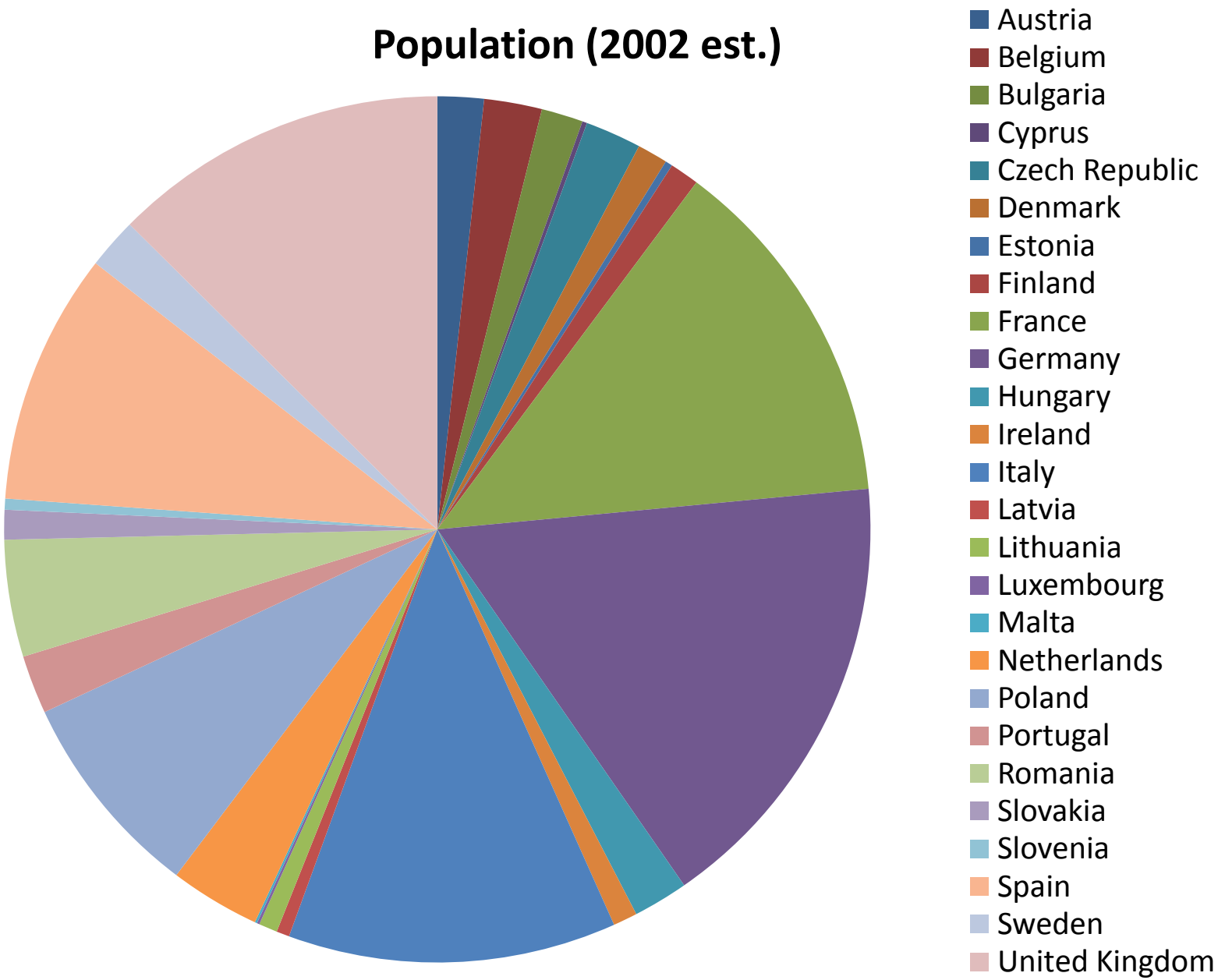
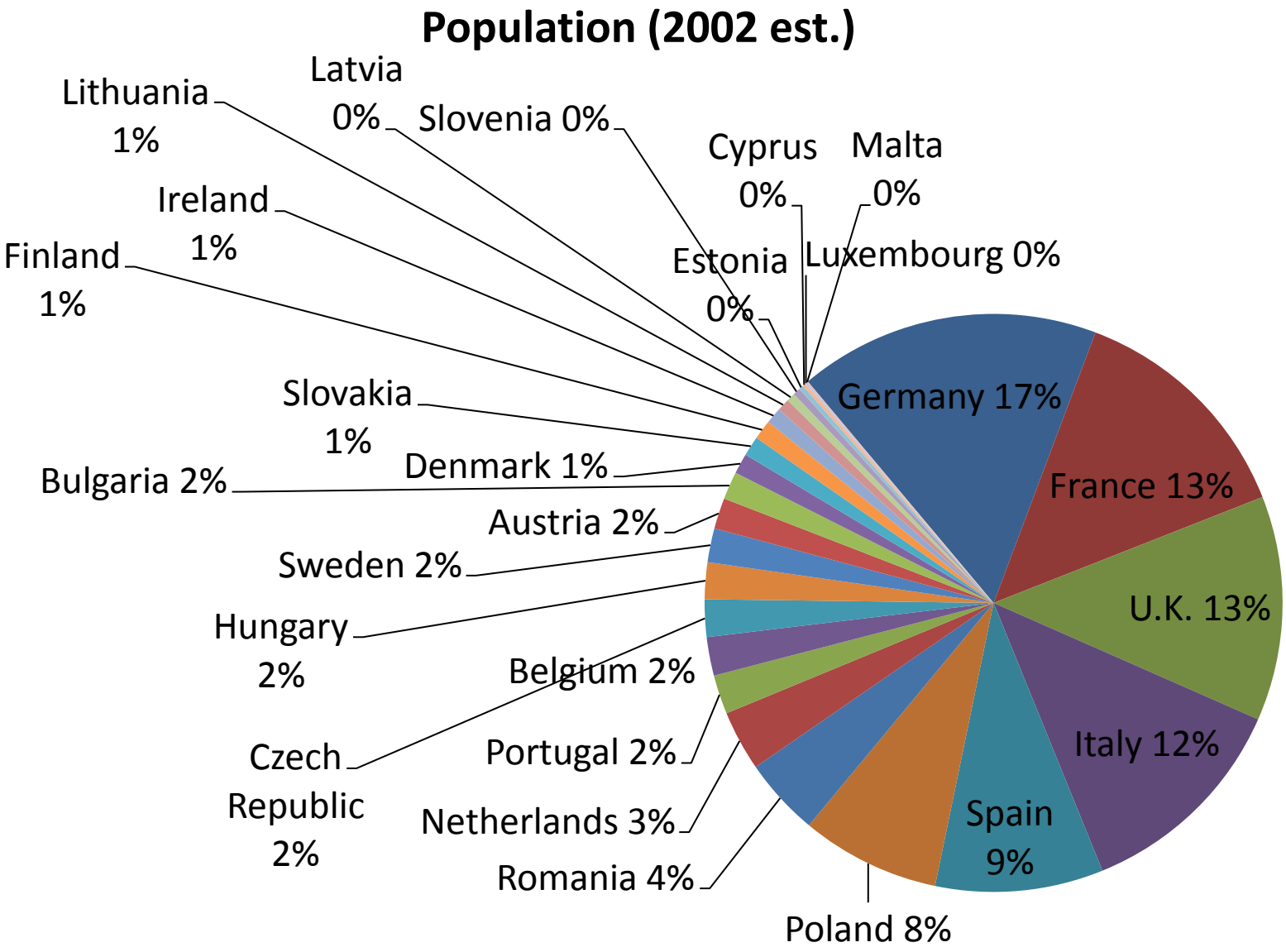


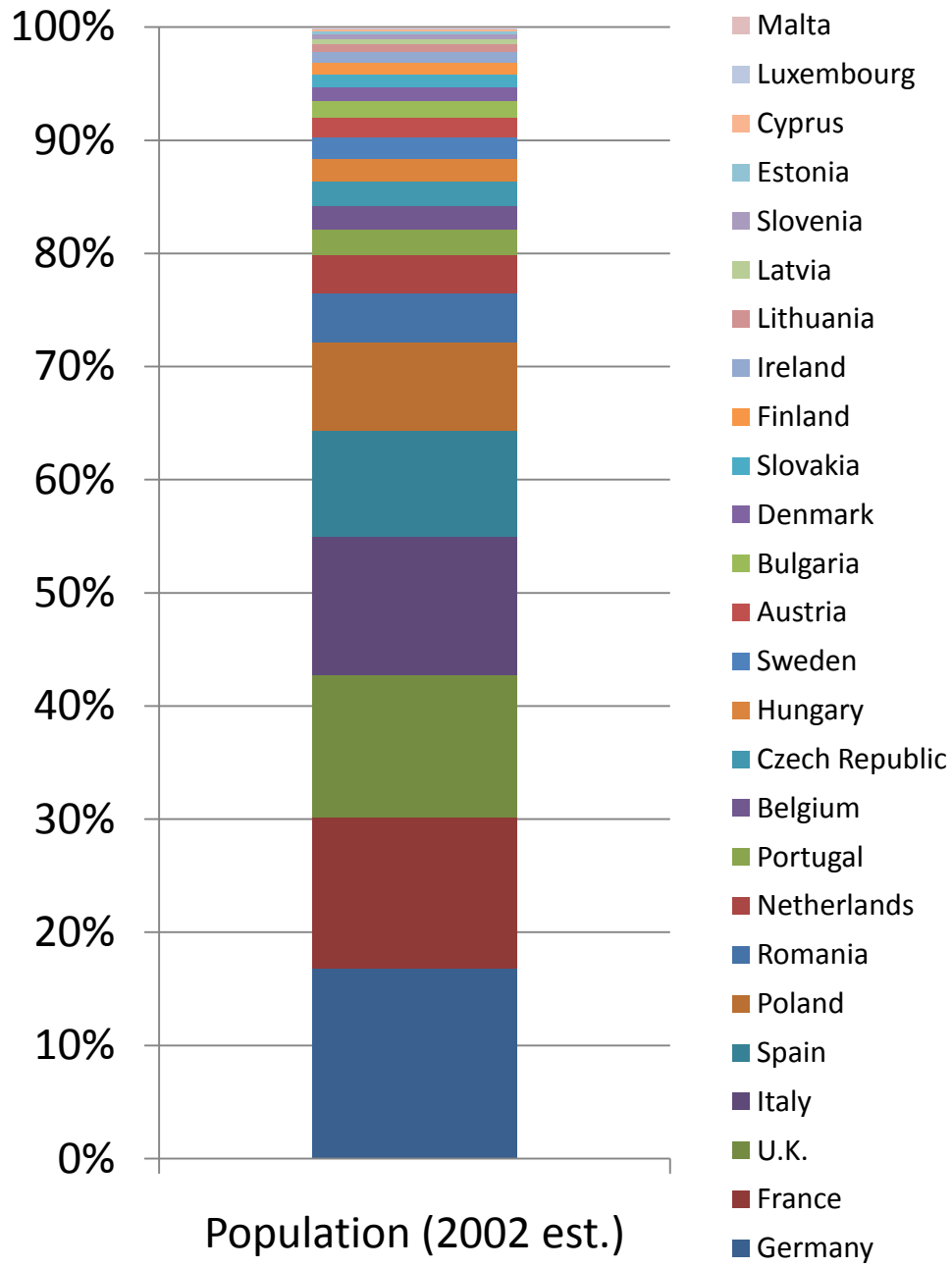
Figure 4. Runtimes for each version on each microbenchmark, normalized by the runtime of the original version. The modified classes required at least twice as much time. Optimizing the modified classes only gave a significant benefit on the Loop Method Invocation microbenchmark.

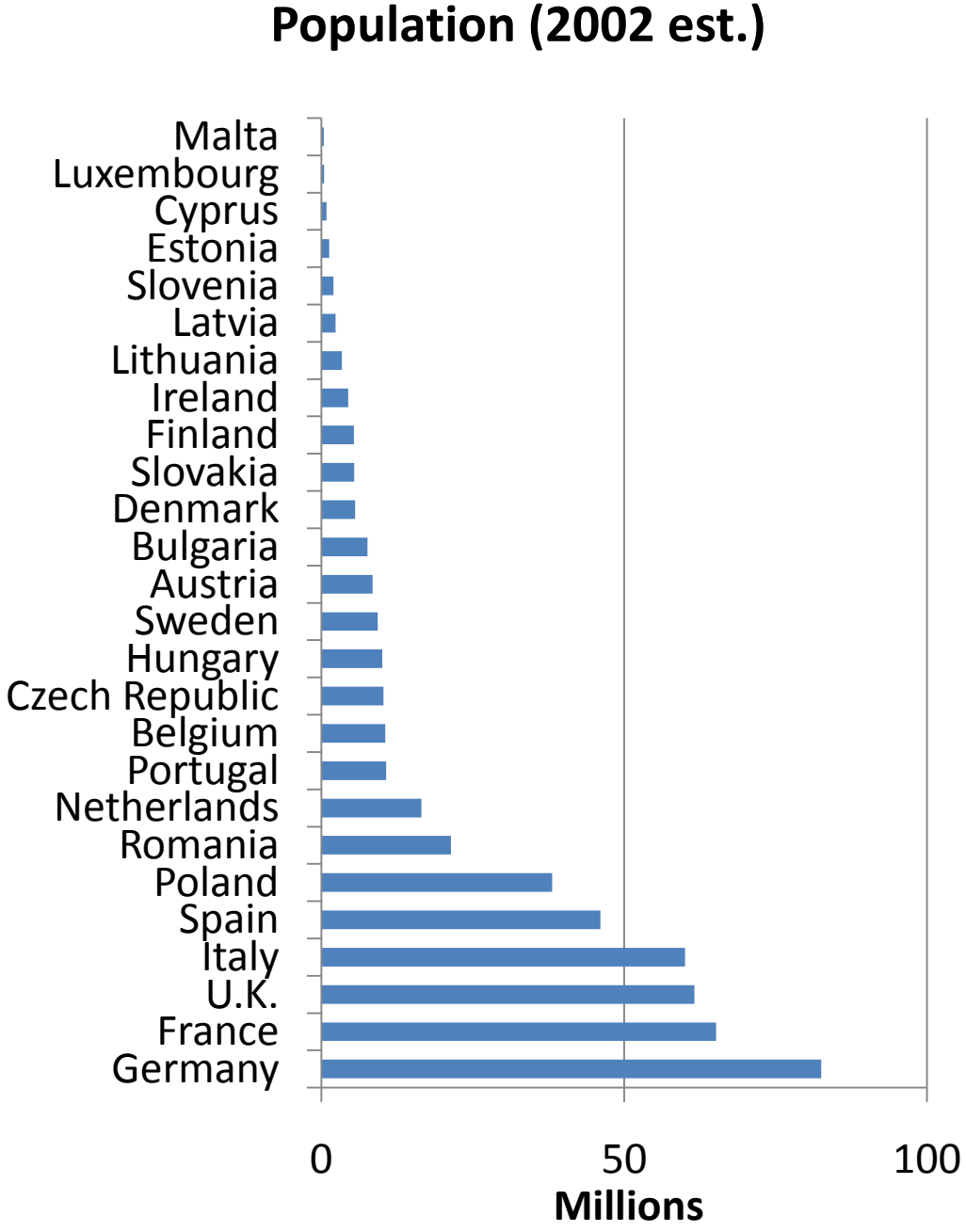

Untreated Cells
TC Treated Cells
FN Treated Cells
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
0.5
1.25
2.5
4
Time (hr)

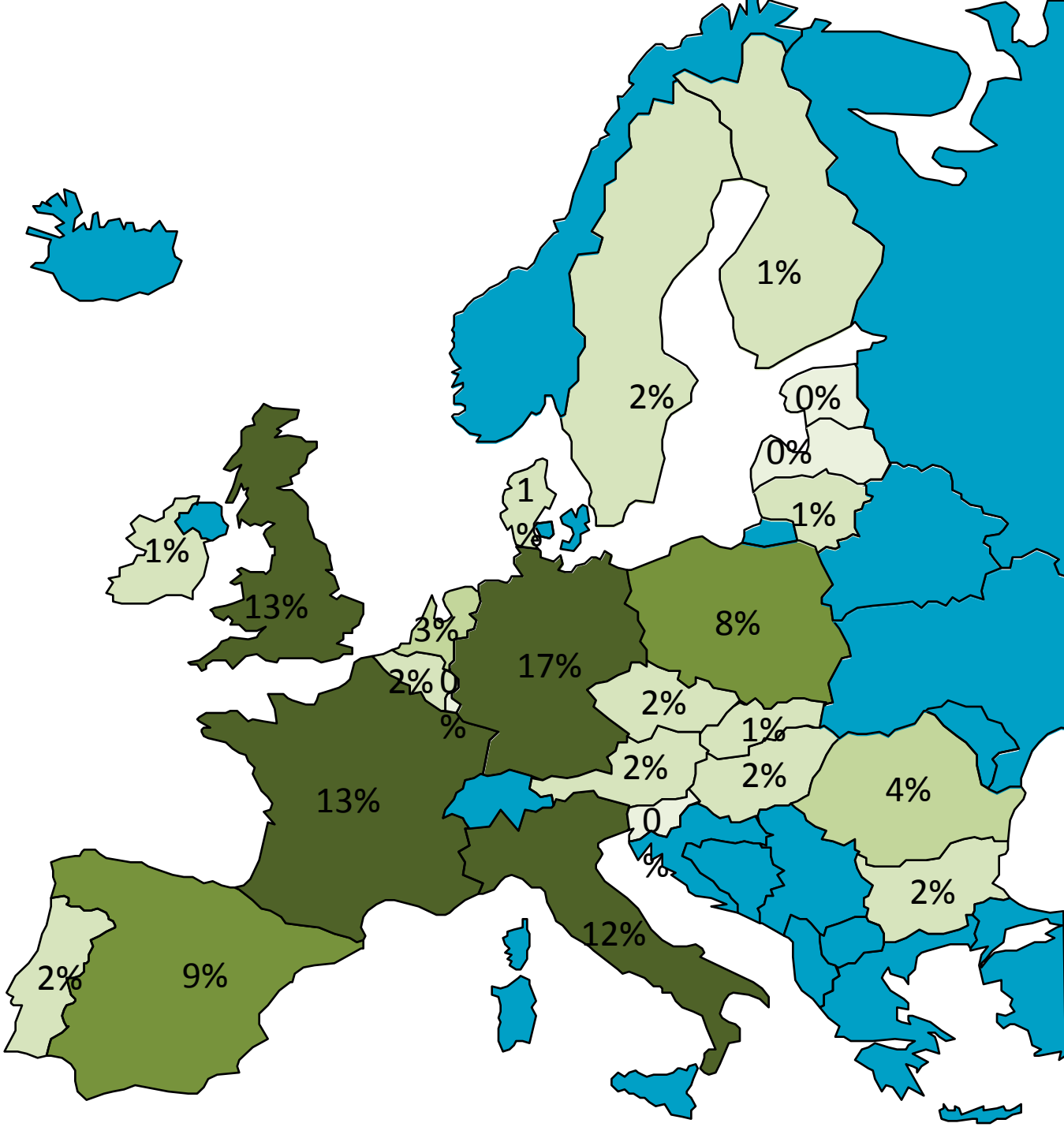

6,000
5,000
4,000
3,000
2,000
1,000
0
Cell Density (cell/cm2)
FN Treated Cells
TC Treated Cells
Untreated Cells
0
0.5
1
1.5
2
2.5
3
3.5
4
Time (hr)


Population (2002 est.)
Austria
Belgium
Bulgaria
Cyprus
Czech Republic
Denmark
Estonia
Finland
France
Germany
Hungary
Ireland
Italy
Latvia
Lithuania
Luxembourg
Malta
Netherlands
Poland
Portugal
Romania
Slovakia
Slovenia
Spain
Sweden
United Kingdom


Population (2002 est.)
Lithuania 1%
Latvia 0%
Slovenia 0%
Cyprus 0%
Malta 0%
Ireland 1%
Finland 1%
Estonia 0%
Luxembourg 0%
Slovakia 1%
Germany 17%
Bulgaria 2%
Denmark 1%
France 13%
Austria 2%
Sweden 2%
U.K. 13%
Hungary 2%
Belgium 2%
Italy 12%
Czech Republic 2%
Portugal 2%
Spain 9%
Netherlands 3%
Romania 4%
Poland 8%


100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Population (2002 est.)
Malta
Luxembourg
Cyprus
Estonia
Slovenia
Latvia
Lithuania
Ireland
Finland
Slovakia
Denmark
Bulgaria
Austria
Sweden
Hungary
Czech Republic
Belgium
Portugal
Netherlands
Romania
Poland
Spain
Italy
U.K.
France
Germany


Population (2002 est.)
Malta
Luxembourg
Cyprus
Estonia
Slovenia
Latvia
Lithuania
Ireland
Finland
Slovakia
Denmark
Bulgaria
Austria
Sweden
Hungary
Czech Republic
Belgium
Portugal
Netherlands
Romania
Poland
Spain
Italy
U.K.
France
Germany
0
50
100
Millions


1%
2%
0%
0%
1
%
1%
1%
13%
3%
17%
8%
2%
0
%
2%
1%
2%
2%
4%
13%
0
%
2%
12%
2%
9%

More Examples

Figure Bestiary

Common Problems Interpreting and Graphing Data