```
Sub DriftSimN100Fixation()
'
' DriftSimN100 Macro
'
' Keyboard Shortcut: Ctrl+Shift+D
'


' Turn off screen updating and automatic calculation
Application.ScreenUpdating = False
Application.Calculation = xlCalculationManual

Dim i As Integer

For j = 1 To 100

' Set up the initial conditions for the run
Sheets("Original").Range("A3:E52").Copy Destination:=Sheets("Simulation").Range("C5:G54")

' Clear the old results to make way for the new ones
Sheets("Results").Range("A2:H501").Clear

' Set i to 1 and assign it as the generation number in the Statistics sheet
i = 1
Sheets("Statistics").Range("J2").Value = i

' Use a progress indicator so you know that things are running
Application.StatusBar = "Run number " & j & " in progress."

' Need to calculate the sheet so that "All Done?" will reset to FALSE
Calculate

Do While Sheets("Statistics").Range("K2") = False
    ' First worksheet calculation - needed to update the Statistics sheet
    ' Calculate
    ' Copy the allele frequencies to Results
    Sheets("Results").Range("B" & i + 1 & ":F" & i + 1).Value = Sheets("Statistics").Range("B2:F2").Value
    ' Copy heterozygosity and allelic diversity to Results
     Sheets("Results").Range("G" & i + 1 & ":H" & i + 1).Value = Sheets("Statistics").Range("E6:F6").Value
     ' Enter the run number into the Results
     Sheets("Results").Range("A" & i + 1).Value = i
     ' Copy the random male offspring to the female block to make a set of female offspring
     Sheets("Simulation").Range("U5:V54").Value = Sheets("Simulation").Range("R5:S54").Value
     ' Calculate again to make a new set of male offspring
     Calculate
     ' Copy offspring to parental block
     Sheets("Simulation").Range("C5:G54").Value = Sheets("Simulation").Range("R5:V54").Value
     ' Increase i by 1 and assign to the generation number
     i = i + 1
     Sheets("Statistics").Range("J2").Value = i
     ' Calculate to update the sheet so that "All Done?" will say TRUE if an allele went to fixation
     ' or if the generation is 500
     Calculate
Loop

' Copy the allele fixed and generation of fixation to the results sheet
Sheets("Results").Range("K" & j + 1 & ":L" & j + 1).Value = Sheets("Statistics").Range("I2:J2").Value
' Add the run number to the results sheet
Sheets("Results").Range("J" & j + 1).Value = j
Next j

' Turn automatic calculation and screen updating back on so Excel will work properly when this completes
Application.Calculation = xlCalculationAutomatic
Application.ScreenUpdating = True
Application.StatusBar = False

End Sub
```