function [ FF ] = FDraw( Cumbeta,Fx,res )

%FDRAW draws a random fitness value from the beta distribution of fitnesses

frac = rand;

i = 1; %Initialize accumulator

while (Cumbeta(i)<frac)&&(i<res)

i = i + 1;

end

if i == 1

Cmin = 0;

else

Cmin = Cumbeta(i-1);

end

ffrac = i/res - (1/res)\*(Cumbeta(i)-frac)/(Cumbeta(i)-Cmin);

FF = ffrac\*Fx;