M Ahsanullah, J Biom Biostat 2014, 5:4
http://dx.doi.org/10.4172/2155-6180.S1.022

OMICS Group Conferences
Accelerating Scientific Discovery

3rd International Conference & Exhibition on
Biometrics & Biostatistics
October 20-21, 2014 DoubleTree by Hilton Baltimore - BWI Airport, USA

Characterizations of distributions via the linearity of regressions of generalized order statistics

M Ahsanullah
Rider University, USA

Let X(r,n,m,k), 1< r< n, k>1, m>-1, r and n integers denote generalized order statistics based on an absolutely continuous distribution function. We consider some basic distributional properties of the conditional distribution of

$$X(s,n,m,k) \,|\, X(r,n,m,k)=x, \; 1<r<s<n$$

Based on the linear as well as non-linear regression of the conditional distribution some characterizations of several univariate continuous distributions are given.

ahsan@rider.edu