962-33-219 **David M Bradley*** (dbradley@e-math.ams.org), Dept. Mathematics and Statistics, University of Maine, 5752 Neville Hall, Orono, ME 04469-5752. Series Evaluations via Identities/Transformation Formulae for Special Functions. Preliminary report.

We discuss some remarkable infinite series identities, many of which were discovered experimentally using human-directed computer searches before being proved. These include series evaluations for certain multiple zeta values, Euler sums, values of the Riemann zeta function, and Catalan's constant. Many of these results have subsequently been proved via identities and or transformation formulae for various special functions. Some open problems and conjectures will also be presented. (Received August 29, 2000)