

## Why not deliver translational medicine benefit to a public who pays by managing translational and genomics practice quality

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Is not ultimate goal of translational medicine to improve the health care delivered to public who pays? Is this not discredited by research reports asserting 'truths' from promising correlations instead of dependable relationships as well as analyses ignoring that data need quality genomics plus quality statistics and that Nature is inherently uncertain? This is substantiated by Stanford Magazine's "When Research Gets It Wrong", Harvard Medical School's lists of misleading assertions, and my invited article in Volume 21, Number 6 of Journal of Biopharmaceutical Statistics. Associations of genes and diseases are not determined, but merely observations from their probability distributions. Quality management may be implemented using Drucker's Philosophy, Deming's Principles, Juran's Processes and Ackoff's Pitfalls that have been well-tested for decades. Based upon observations during the 2011 UCLA/IPAM's High-Throughput Genomics Workshops, typical genomics practices exhibited apparent statistical insufficiency in executing our gene sequencing, gene analyses, gene-and-disease associations, and genomics quality management. Why not incorporate the public within our stakeholders as well as statistics within our designs of sequencing experiments, analyses of major uncertainties, correlation findings, relationship inferences, visualizations, calibrations of sequencing technology over laboratories and at appropriate times plus the management of quality into our practices of translational medicine and genomics.

### Biography

Arnold Goodman utilized statistics to solve important engineering, IT and management problems in aerospace, petroleum and county government for 45 years after 1961 Stanford PhD in mathematical statistics under Herman Chernoff. In 1967, he cofounded "Symposia on the Interface of Computing Science and Statistics", which had its 2012 Symposium at Rice University. As 1997 cofounder of UCI's Center for Statistical Consulting, he served on College of Medicine's Advisory Board for Clinical Research. He learned genetics for 2004 article developing first process model of Cellular DNA-to-Protein Cycle, and genomics for 2011 article establishing DNA-to-Protein Uncertainty, which validate Paul Silverman's final vision.

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