# R. Douglas Martin Curriculum Vitae

## **Education**

- B.S.E., Electrical Engineering with Physics Option, Princeton University, 1959
- M.S.E., Electrical Engineering, University of Washington, 1965
- Ph.D., Electrical Engineering, Princeton University, 1969.

## **Academic Positions**

- Assistant/Assoc. Professor, Elec. Engineering, Univ. of Washington, 1969 -79
- Professor, Electrical Engineering, 1979-80
- Professor, Statistics, University of Washington, 1980 present (Chair 1984 86)
- Adjunct Professor of Finance, University of Washington, 2003 present
- Director, Computational Finance Program, Univ. of Washington, 2003-present

# **Consulting**

Bell Laboratories, Mathematics Research Center, Murray Hill, N.J., 1974-1984.
 Basic research on times series modeling and robust statistical methods.

# **Academic Accomplishments**

- Served as second Chair of the Department of Statistics. During the early formative years as Chair and afterwards, helped build the Statistics Department from three faculty members toward a very strong department of twelve faculty members with a top-ten rating.
- <u>Built a significant academic research program</u>. Focused on the areas of time series modeling and robust statistics, with numerous publications, considerable federal grant and contract funding, and a number of top Ph.D. students.
- Created UW Computational Finance Graduate Certificate program. Launched in 2004 jointly with the Departments of Economics, Finance, Mathematics and Statistics, primarily with Professor Eric Zivot. Have served as Director along with the support of Eric Zivot as Co-Director. During the past several years the program has graduated and placed 12 Ph.D. students from several departments and one M.S. student, mostly in finance industry jobs but also a few in academic jobs. In a 2007 check on the 8 Statistics Department students then in the program, they all had GPA's in the top quartile among all Statistics Ph.D. students. I am currently advising four Statistics Ph.D. students in the program.

## **Commercial Positions**

- Founder and Chairman, Statistical Sciences, Inc., 1987 1993
- Founder and Chairman, FinAnalytica, Inc. (2003 2006)
- CEO and Chairman, FinAnalytica, Inc. (2006 2008)

## **Commercial Accomplishments**

- Founder and Chairman, Statistical Sciences, Inc., 1987 1993. Founded StatSci in 1987 to commercialize the S language developed at Bell Labs, in the form of the product S-PLUS. Funded company on \$80K of personal money, and company was profitable for four straight years after the first year of operation without requiring a line of credit. Set vision and direction of company, including the S-PLUS product line, the S-PLUS finance industry products (S+NuOPT portfolio optimizer, S+FinMetrics financial econometrics toolkit, and Insightful Miner Data Mining product). Served as de facto product marketing manager for these products. Created and led a successful and rapidly growing government grant/contract funded Research Department at StatSci, funded at \$5M/year. Sold StatSci to MathSoft, Inc. in 1993.
- Founder and Chairman, FinAnalytica, Inc. (2003 2006). Co-Founded
  FinAnalytica in 2003 and acquired the assets of the Bravo Risk Management
  group, including its Cognity Portfolio Construction and Risk Management System
  and Development team of 15 FTE in Sofia, Bulgaria. Served as Chairman from
  2003 to 2006.
- <u>CEO and Chairman, FinAnalytica, Inc. (2006 2008)</u>. Primary vision setting for FinAnalytica business and Cognity product development and direction. Responsible directly or indirectly for Cognity sales to a majority of FinAnalytica key customers, including Tremont, UBS O'Connor, National City, McKinley Capital, FRM and Zurich Alternatives. Responsible for vision and decision to create a Cognity Fund-of-Hedge Funds (FoHF) product. Developer of S-PLUS prototype FoHF product for K2 and our Cognity FoHF launch customer Tremont. Changed direction from narrow focus on FoHF to broader fund-of-funds (FoF) market that includes family offices, endowments and pension plans. Left company at end of 2008.

# Selected Refereed Papers

Martin, R. D. and Yohai, V. J. (1986). `Influence functionals for time series", Invited Discussion Paper, *Annals of Statistics*, *14*, *981-855*.

Martin, R. D. and Bruce, A. (1989). ``Leave-k-out diagnostics for time series'', Invited Discussion Paper, *Jour. Royal Statistical Society, B, 51, 363--424*.

Martin, R. D., Yohai, V. J. and Zamar, R. H. (1989). "Min-max bias robust regression", *Annals of Statistics, Vol. 17, 1608-1630.* 

Martin, R.D. and Simin, T. (2003). "Outlier-Resistant Estimates of Beta", *Financial Analysts Journal*, Sept.-Oct. issue.

Martin, R.D., Rachev, Z., and Siboulet, F. (2003). "Phi-Alpha Optimal Portfolios and Extreme Risk Management", *The Wilmott Magazine*, November issue.

Martin, R. D., Clark, A and Green, C. G. (2009). "Robust Portfolio Construction", in *Handbook of Portfolio Construction: Contemporary Applications of Markowitz Techniques*, J. B. Guerard, Jr., ed., Springer.

Bailer, H., Maravina, T. and Martin, R. D. (to appear 2010). "Robust Alphas and Betas", in *Handbook of Quantitative Asset Management*, Oxford University Press.

## **Books**

Scherer, B. and Martin, R. D. (2005). Modern Portfolio Optimization, Springer.

Maronna, R. Martin, R.D., and Yohai, V. J. (2006). *Robust Statistics: Theory and Methods*, Wiley.

# **Short Courses for Finance Professionals 2004-2009**

"Modern Portfolio Construction with NuOPT, S-PLUS and S+Bayes" (with Bernd Scherer), 2-Day short course, May, 2004 and 2005, NYC.

"Optimizing Portfolios with Fat-Tailed Distributions and Expected Tail Loss", two-hour segment of two-day Risk Training course in London (May 17-18) and NYC, May 21-22, 2007, and repeated in May, 2008.

"Robust Portfolio Contstruction" and "Tail-Risk Budgeting", two one-hour segments of two-day short course on Portfolio Construction in NYC, April 24-25, 2009.

## Selected Finance Industry Conference Presentations 2004-2009

"Modern Bayes Methods in Finance", invited presentation at Society for Quantitative Analysts conference, NY, November 18, 2004.

"Post-Modern Portfolio Construction and Risk Management", invited Boston Security Analysts Society meeting, Boston, June 1, 2006.

"Post-Modern Portfolio Construction and Risk Management" (with Stoyan Stoyanov), Quant-Invest conference, London, Sept. 22, 2008.

"Tail-Risk Budgeting", invited Global Association of Risk Professionals (GARP) meeting, NYC, April 29, 2009.

"Tail-Risk Budgeting", invited Global Association of Risk Professionals (GARP) meeting, Seattle, December 8, 2009.