

**2010 Marks Fifth Year for ERM Symposium Scientific Papers Track**  
**By Steven C. Siegel, SOA Research Actuary**

The 2010 ERM Symposium marked the fifth year that a call for ERM-related research papers has been issued in conjunction with the symposium. As in past years, the goal of the call for papers has been to provide a forum for the very latest in ERM thinking and move forward principles-based research. Once again, the Call for Papers provided an opportunity for thought leaders and innovators to share their ideas and push the boundaries of ERM.

This was also a very special year for the ERM Call for Papers with the award presented by the Actuarial Foundation being officially renamed as the ERM Research Excellence Award in Memory of Hubert Mueller, with significant financial support from Towers Watson. Hubert Mueller was a pioneer in ERM and the award recognizes his significant and important contributions to the field. At the awards session, Patricia Guinn of Towers Watson gave a moving tribute to Mueller and noted his involvement in all aspects of furthering ERM and in particular, his tireless work benefiting the ERM Symposium. Special thanks to Tom Corcoran of Towers Watson for his work on behalf of the award.



*From left to right: Neil Bodoff, the Actuarial Foundation 2010 ERM Research Excellence Award in memory of Hubert Mueller winner, the family of Hubert Mueller, Patricia Guinn, and Tom Corcoran*

For 2010, Fred Tavan again reprised his role as chair of the review group and led the group through the review of over 30 abstracts and papers. The papers review committee included Maria Coronado, David Cummings, Riaan DeJongh, Wayne Fisher, Hui Gan, Dan Oprescu, Nawal Roy, Matthieu Royer, Max Rudolph (previous Chair of the group), Greg Slone, Barb Scott, Richard Targett, Fred Tavan, Al Weller and Robert Wolf. As in previous years, choosing from among the abstracts for nine presentation slots at the symposium required a great deal of review and careful consideration.



*Fred Tavan, chair of the ERM Symposium Call for Papers*

The final task of the committee was to select the prize winning papers. The three prizes awarded at the symposium are: the Actuarial Foundation ERM Research Excellence Award in memory of Hubert Mueller for Best Overall Paper; the PRMIA Institute New Frontiers in Risk Management Award; and the Joint Risk Management Section Award for Practical Risk Management Applications.

The award winners along with the paper abstracts are shown below. Awards were presented at the ERM Symposium Opening session held on April 12<sup>th</sup>, 2010.

We wish to thank all the organizations and committee members for their support and for making this a success.

2010 Actuarial Foundation ERM Research Excellence Award in memory of Hubert Mueller for Best Overall Paper: “Discarding Risk Avoidance and Embracing Risk Optimization: Managing Reinsurance Credit Risk” by Neil Bodoff



*Patricia Guinn presents the 2010 Actuarial Foundation ERM Research Excellence Award in memory of Hubert Mueller to Neil Bodoff.*

**ABSTRACT**

*Property-casualty insurance companies tend to focus on avoiding and controlling their exposure to reinsurance credit risk. This paper advocates switching from this risk avoidance and compliance mentality to a probabilistic and market based view in which one seeks to measure, hedge, exploit, and optimize risk.*

2010 PRMIA Institute Award for New Frontiers in Risk Management: “Bayesian Risk Aggregation: Correlation Uncertainty and Expert Judgement” by Klaus Bocker, Alessandra Crimmi, and Holger Fink



*John Manistre (right) accepts the 2010 PRMIA Institute Award for New Frontiers in Risk Management from Steve Lindo (left) on behalf of Klaus Bocker, Alessandra Crimmi, and Holger Fink, who were unable to attend the Symposium.*

#### **ABSTRACT**

*In this paper we present a novel way for estimating aggregated EC figures based on Bayesian copula estimation. Contrary to the classical approach of using a single (point estimator) inter-risk-correlation matrix we derive a probability distribution of possible correlation matrices that enables us to tackle the important issue of parameter uncertainty. More precisely, we describe in detail how formal expert judgement can be performed and utilised to augment scarce empirical, resulting in a posterior distribution that contains all relevant information about the inter-risk-correlation matrix. We then present simulation algorithms based on Markov-Chain-Monte-Carlo methods that allow to simulate sample correlation matrices from different posterior distributions. Finally, we give a numerical example that serves to illustrate our new approach and, in particular, shows how important accuracy measures for aggregated economic capital and diversification benefits can be obtained by adopting a Bayesian perspective.*



2010 Joint Risk Management Section Award for Practical Risk Management Applications: “The Human Dynamics of the Insurance Cycle and Implications for Insurers: An Introduction to the Theory of Plural Rationalities” by David Ingram and Alice Underwood



*David Ingram (left) accepts the Joint Risk Management Section award from Fred Tavan.*

**ABSTRACT**

*There has been a diversity of explanations for the insurance cycle. Almost all of these assume that market participants share a common risk perspective and a common goal of profit maximization. But if we relax this assumption and allow for the plural rationalities suggested by Cultural Theory, as well as the idea from Cultural Theory that there is a reflexive relationship between the marketplace and market participants, a significantly different explanation arises.*