

2012 MEDALS & AWARDS

MARY C. RABBITT HISTORY AND PHILOSOPHY OF GEOLOGY AWARD

Presented to
Gary D. Rosenberg



Gary D. Rosenberg
Indiana University-Purdue University (IUPUI)

Citation by James C. Dawson

It is my great pleasure to present the 2012 Mary C. Rabbitt Award of the Geological Society of America's History and Philosophy of Geology Division to Gary D. Rosenberg. I have known Gary for several years through our shared interests in the history and philosophy of geology and through the work of this Division. We connected quickly at one of these Division luncheons some years ago when we learned that we both did our higher education work at the same two universities at about the same time. However, we attended these institutions in reverse order with Gary earning his B.S. degree at the University of Wisconsin, Madison while I was at the University of California, Los Angeles (UCLA). Gary then went to UCLA for his Ph.D, while I went to the University of Wisconsin, Madison for my Ph.D. work. We did not meet until later and, we found that we had many friends and colleagues in common and that we had both been introduced to the history of geologic thought in Bob Dott's course at Wisconsin-Madison.

The Rabbitt Award is presented to an individual for exceptional scholarly contributions of fundamental importance to our understanding of the history of the geological sciences. Gary has exemplified

these characteristics through his numerous publications on art and geology. His particular emphasis is on the Renaissance development of the anatomical analogies of landscape that facilitated the origin of the science of landscape. His unique approach to the integration of art history studies with the history and philosophy of the geological sciences was featured in a two-page article about Gary in the *Chronicle of Higher Education*, January 25, 2002 issue. Gary has been a regular presenter at our Division-sponsored sessions at GSA Annual Meetings and at the North Central Section Meetings since the late 1990's.

Perhaps the pinnacle of Gary's work was his organization of the Division's topical session at the 2006 GSA Annual Meeting in Philadelphia entitled 'From the Scientific Revolution to the Enlightenment: Emergence of Modern Geology and Evolutionary Thought from the 16th to the 18th Century'. Following this session Gary edited the presentations into GSA Memoir 203, an opus that has been well received by the international community as well as by the members of our Division. This volume is now a classic reference for those interested in pre-paradigm geology, its cultural context from the Renaissance through the Enlightenment, and its continued influence on modern geology.

As a Division committee member, it was my pleasure to work closely with Gary when he unexpectedly served as our Division Chair (2005), when a First Vice Chair decided not to advance to the chairship, and then continued on schedule as Division Chair (2006). As Chair, he was exceptionally energetic and well organized. As Chair, he worked with Vic Baker and others to lead the effort to add 'and Philosophy' to our Division name. Previously Gary had served the full range of Division Vice Chairships and committee positions. He is well known to us as one of our strongest supporters.

Gary is trained as a geologist and has published many papers on sea level change and growth periodicities in brachiopods and bivalve molluscs. He has also published on rhythmic dentinogenesis in rabbit and rat incisors. Indeed growth rhythms and periodicity have long fascinated Gary. Gary's post doctoral career has included work as a NATO Senior Fellow on growth rhythms and the history of the earth's rotation, work at the National Institutes of Health on the chronobiology of bone and teeth, a year as a geology faculty member at Michigan State University and finally, since 1979, a distinguished career in geology at

Indiana University – Purdue University in Indianapolis.

Gary has recently retired to his home state of Wisconsin to continue his scholarly research and writing in the history and philosophy of geology and the Division Awards Committee believes that this is the time to honor Gary D. Rosenberg with the embossed certificate and the pewter Revere bowl that indicate that he is the 2012 Mary C. Rabbitt awardee. Congratulations, Gary.

Response by Gary D. Rosenberg

Thomas Kuhn wrote that young scientists or those new to a field are typically the ones who make the most significant contributions to it. In gratefully accepting this wonderful award, I note that I was neither in the '90's when I began to publish on the nexus of art history and history of geology. Apparently Kuhn did not consider that it takes some time for a fine wine to mature. I was grape juice nearly 50 years ago when I was an undergrad at the University of Wisconsin. Bob Dott's course on the history of geologic thought set me fermenting about Leonardo Da Vinci's role as founder of geology. I slowly aged into a full-bodied art historian though some might say that I'm just curmudgeon vinegar. I cannot deny it. I must admit some acidity was needed to etch through the steely barricades that some art historians erected against my assault on their territory.

It's the cultural context and historical changes in the conception of nature that have interested me. As Kuhn observed, changes in conception precipitate scientific revolutions. Just as rocks are texts from which we read Earth history, so art objects are texts from which we can read the cultural context in which scientific discoveries are made. In this case it's how the Renaissance revolution in the conception of spatial relationships pervaded Western culture and facilitated the science of landscape. I thank the writings of Samuel Edgerton for aiming me in the direction of this insight.

The theme of spatial relationships brings my interest in art history into a single focus with that of the geometry of metabolism and skeletal composition. Only recently did I realize I was trying to paint a picture of metabolic and compositional variations within organisms the way artists shade images of organisms they paint. As an early edition of Dott and Batten asserts, geology is the story of the chemical evolution of our planet. The geometry of life's physiology is integral to that story.

2012 MEDALS & AWARDS

The revolution in conceptualization of spatial relationships not only gave birth to the evolutionary view of the structure of nature but also to scientists' place in the democratic social order. We as geologists have a special contribution to make in illuminating that perspective and I have only begun to call attention to our opportunity to do so.

In closing, I herewith toast those who have mentored my maturation. These include my "Steno friends," August Ziggelaar SJ, Troels Kardel, Jens Morten Hansen, Frank Sobiech, Elsebeth Thomsen, and Minik Rosing; members of the History and Philosophy of Geology Division GSA, Bill Brice, Sally Newcomb, Michele Aldrich, Ken Bork, Ken Aalto, Steve Rowland, and Vic Baker; my PhD

advisor Clarence Hall and my late chairman at IUPUI, Arthur Mirsky. Special thanks to Jim Dawson who had the courage to nominate this curmudgeon for this auspicious award. The Mary C. Rabbitt Bequest facilitated my chairmanship in the History and Philosophy of Geology Division, GSA. I thank you all for celebrating an aging wine.