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**SPR AWARD, 2002**

## For distinguished contributions to psychophysiology: Michael G. H. Coles

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*At the Forty-Second Annual Meeting of the Society for Psychophysiological Research, the award for Distinguished Contributions to Psychophysiology was presented to Michael G. H. Coles. The following is the citation given by Gregory A. Miller on behalf of the Society's Awards Committee on October 5, 2002.*

Across a career spanning more than three decades, Michael G. H. Coles has been and remains a stellar international scientist, in the very first rank of the field. It is no surprise, but it is wonderful news, that the Awards Committee of the Society for Psychophysiological Research has selected Mike to receive SPR's highest honor, the Award for Distinguished Contributions to Psychophysiology. SPR does not give this award lightly and does not do it every year, reserving it for the very best scholars in psychophysiology.

Mike grew up in a small, rural town north of London, called Radlett. At age 7, he was sent to a private boarding school. After graduation from high school, he worked for a year in Australia, returned to England to an apprenticeship in accounting, and then worked in a psychiatric hospital. This early diversity of labor and geography presaged his later career in psychophysiology.

Mike entered the University of Exeter, where he earned honors in both psychology and philosophy, and then a Ph.D. in psychology, with Tony Gale as his mentor and Irene Martin as his external examiner. His doctoral training was supported by a fellowship from the British Social Science Research Council. Besides Tony, Mike credits Bert Mulder and Jean Requin as major influences over the years.

Mike was hired at Illinois in 1970, without ever seeing the United States, and without the department interviewing him in person, which would have been unthinkable 10 years later. What a gamble on both sides! Neither side could have foreseen just how successful that gamble would prove to be.

I took my first psychophysiology course in college in 1974. As part of a very selective course syllabus, my graduate teaching assistant, a very young Richie Davidson, assigned a sole-author, 1972 paper by one M. G. H. Coles, on cardiac and respiratory activity during visual search. I had no idea that I would have the honor of having Mike as a colleague, friend, and mentor for the past 20 years.

By the time I started reading Mike's work in 1974, he had over a dozen peer-reviewed journal publications and had already expanded beyond the personality research of his graduate training. He was already publishing an exemplary series of

studies of heart rate as a measure of cognition, with his first Master's student and SPR current President-Elect, Connie Duncan. Connie, like Mike's first Ph.D. student, Jules Harrell, was in the Clinical Psychology program at Illinois—early evidence of the breadth of students and collaborators that Mike would work with. Throughout his career Mike has been an invaluable resource, model, and teacher for my students and many others, not only at Illinois but internationally.

Mike retired formally from Illinois last year, because of a peculiarity of the university retirement system that meant that he would otherwise have been working nearly for free. But Mike has not retired from his career. He is not even 60 yet, or all that close to it. He remains active in our cognitive neuroscience seminar, and he has a new position as a Research Fellow at the Donders Centre for Cognitive Neuroimaging in Nijmegen in the Netherlands. He has a major theory paper in the October 2002 issue of *Psychological Review*, with his former student, Clay Holroyd, on computational modeling of error processing. The field looks forward to many more years of his brilliance, leadership, mentoring, good humor, and grace.

In retrospect, one can see some of the themes that have guided Mike's career in his dissertation, entitled *Individual Differences in Relation to Measures of Attention and Arousal*. This tome was nearly 8 cm thick, not counting the binding. Six experiments consumed 560 pages, little of which was spent on figures or tables—he actually wrote that much, setting a record at his university for the longest dissertation across all fields of scholarship. The dissertation research tested theories of personality, using auditory vigilance tasks, with measures spanning EEG, electrodermal activity, heart rate, and finger pulse volume. Physiological measures were taken preceding stimulus detections and errors of omission. Two of the experiments were focused on method issues. The dissertation thus illustrates several things characteristic of Mike's subsequent career:

- Multiple measures brought to bear on a broad but coherent set of questions;
- Multiple experimental paradigms converging on those questions;
- Extensive, explicit grounding in theory;
- Thorough consideration and exploration of methodology.

At the risk of oversimplification, Mike's career can be framed as an emphasis on personality and attention during his doctoral training, on cardiac measures of cognition in the 1970s, on ERP

and EMG measures emphasizing the lateralized readiness potential in the 1980s, and on ERP and MEG research emphasizing error processing in the 1990s into the present. He has made state-of-the-art contributions on each front. Note that error processing was one focus of his dissertation, so in one sense he has come full circle.

Besides those substantive themes, Mike codeveloped important methodologies for the correction of eye-movement artifact, the scoring of the lateralized readiness potential, and the vector representation of ERP component topography. He has been prolific on many fronts. In addition to his 113 journal articles and publications are his 13 books, including:

- a volume based on the Festschrift for former SPR presidents Bea and John Lacey, coedited with John Stern and Dick Jennings;
- the enormous 1986 handbook on psychophysiology, coedited with Manny Donchin and Steve Porges;
- and the *Advances in Psychophysiology* series, coedited with Dick Jennings and Pat Ackles.

One of Mike's major involvements at Illinois was with the Cognitive Psychophysiology Laboratory, Manny Donchin's famed CPL. For years after I moved to Illinois, I attended the weekly lab meetings of the CPL. Mike joined the CPL shortly before I did, and he served as its Associate Director. Although Manny was very active as the founder and Director of the CPL, he was also very busy as department head for most of Mike's 20 years as Associate Director, and Mike provided a significant portion of the intellectual leadership and student mentoring. Mike and Manny were a formidable team and together trained dozens of young scientists and hosted many visitors to the CPL over the years.

Mike was not a self-absorbed scientist focused only on his scholarship. As a valued colleague in Champaign, he won several teaching awards, served on major campus committees, and made numerous major administrative contributions, including:

- 5 years as Program Director of our NIMH cognitive psychophysiology training grant;
- 9 years as Chair of our Biological Psychology program;

- 23 years as Director of our highly regarded undergraduate Psychology Honors Program.

Mike has also made major contributions to SPR. He first attended SPR in 1970 and has not missed a meeting since. He was Program Chair in 1979. He was elected to the SPR Board of Directors before serving as its 28th President in 1987–1988. He was Editor of *Psychophysiology* for 7 years and served on six different SPR committees. Surely Mike has the record in having published with nine other SPR presidents at various stages of their careers.

Mike helped to bring Evgeny Sokolov to the United States and to the SPR meeting in 1988, where he received the award that we are now giving Mike. Sokolov returned to Champaign in April, 2002, for Mike's retirement Festschrift, and I can tell you that Professor Sokolov is just as intense and delightful as we found him 14 years ago. This is one example of Mike's continuous contributions to bridging and building the international psychophysiology community.

Spending even a little time with Mike, one quickly realizes that he is a terrific scientist with an exceptional ability to perceive and articulate the essential issues in an experiment. He makes it seem easy. And he does it across an extraordinary range of content areas and methods. It is no wonder that he has been a very popular discussant, for a wide range of symposia at SPR meetings and elsewhere, reflecting not only his broad expertise but the steel-trap mind that lies just beneath his genteel exterior.

One of the special things about Mike is that there is not a clear line between science and life. He does not tire of science, and he does not tire of offering good will toward those around him. There is a genuine, measured enthusiasm, as well as a respect for those he works with, whatever their level of seniority. He demonstrates that science is social—not a grind. This makes him a delight as a colleague, as well as an inspiration to students. He makes it fun to do science, to talk about ideas, to think through strange data, to design new studies. The insightful scientist, and the gentleman playmate, are both always available.

SPR looks forward to many more years of Mike's brilliance, leadership, mentoring, good humor, and grace.

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