NOTEWORTHY

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Conference organizer Dr. Lynden Rogers (facing the camera with microphone) fronting a panel discussion with other conference presenters

"AGE OF LIFE ON EARTH"

Conference Report

BY NATHAN BROWN

Acknowledging Tensions, Seeking Dialogue

n addressing questions around its topic, Sydney Adventist Forum's "Age of Life on Earth" conference acknowledged the tensions between key theological assertions and apparent scientific conclusions. "But we have to live with these tensions," reflected conference convenor Dr. Lynden Rogers, "rather than resolve them cheaply."

As such, the various papers presented at the conference addressed the three key questions of how best to read the biblical accounts of the creation of life on earth, how best to understand current scientific understandings that might support or challenge these readings, and how to hold these two streams of knowledge.

"We are honestly trying to be fair to data and give every case the best possible utterance," explained Rogers, a recently retired lecturer in physics and president of Sydney Adventist Forum. "Not everyone will agree, but Forum puts up ideas and if people don't like them that is okay."

Hosted at The Church in the Trees in Morisset, in the Lake Macquarie region north of Sydney, on June 11 and 12, the conference attracted about ninety participants onsite, with a further fifty registered to participate from around the world via the livestream of the sessions. Because of COVID-19 restrictions and limited venue availability, the conference was condensed from its original three-day format into two days, with three major presentations and papers made available to participants in the week leading up to the conference.

"We were desperately trying to host an event that would be inclusive and foster dialogue," said Rogers. "And many of the participants have responded positively to us in the conference's immediate aftermath."

The papers from the "Age of Life on Earth" conference—with extended treatments of the presentation topics—are planned for publication in book form within an anticipated 12-month time frame. "The book will allow us to shape some rough edges and to improve the presentation of some of the topics from the conference," Rogers added.

This report offers a summary of the key presentations.

Pre-Conference Papers

"Arguments in Favor of a Recent Age for Life on Earth" by Dr. Lynden Rogers

Rogers invited a number of academic defenders of more traditional Adventist approaches to contribute papers or presentations to the conference, without positive response. Wanting to represent these perspectives in the collective thinking of the conference, he prepared and circulated an overview paper that presented the theological assumptions, geological arguments that might support a young earth and thus a recent age of life, and biological objections to an older age of life. "Individually and in combination," Rogers's paper concluded, "these considerations suggest to many Seventh-day Adventists, among other evangelical Christians, that life on Earth is young by conventional scientific timescales and is likely to be less than 20,000 years." Having prepared these arguments, he again sought and received some input from key scholars—and repeated his invitation for these thought leaders to participate in the conference, even if only by attendance.

"The Creation Narrative Part 1" by Dr. Rudy Van Moere

The conference's keynote speaker recorded his presentations, being unable to attend in person because of



After sharing his pre-recorded presentation, Dr. Rudy Van Moere briefly connected with conference participants from Antwerp on June 12.

COVID-19 travel restrictions. Professor Rudy Van Moere is emeritus professor of Old Testament and Biblical Hebrew of the Faculty of Protestant Theology at Brussels University, and emeritus pastor of the Adventist churches in the Netherlands and Belgium–Luxembourg.

He focused on the creation narrative of Genesis 1:1–2:4a, pointing out that the authors were not historians or journalists but storytellers, pastors, and educators. "It is necessary and indispensable to read biblical narratives accurately, defining their genre and the context in which they were written," he urged, before proceeding to do this in remarkable detail. His first presentation highlighted repetition in Genesis's narrative text but also the key instances that break the cycles of repetition. He pointed out the many patterns of sevens in the narrative and also in the literary structure of these texts. This emphasizes the centrality of the Sabbath motif and the centrality of the creation of humanity in the image of God.

Van Moere summarized the agenda of the creation narrative as three dimensional: to glorify God as creator, instruct humanity as to their identity as created in the image of God, and to assign man and woman their roles to procreate and take care of nature. He also drew attention to the "remarkable" literary parallels between the Creation narrative and the Abram narrative later in Genesis. He concluded the first part of his presentation by describing the Creation narrative as a "begetting" narrative that echoed the claims of the Hebrew people being a special work of God, a blueprint for understanding Israel's origins and existence.

"The Creation Narrative Part 2" by Dr. Rudy Van Moere

Van Moere began his second presentation by seeking to place the Hebrew creation narrative among the literature of the ancient Near Eastern world, referencing and comparing Egyptian and Mesopotamian creation narratives, which he argued would have been known by the notional writer of the Genesis narrative. Such a comparison "teaches the readers how completely different Israel's God is from the gods of the Egyptians and the Babylonians." It is not defensive or apologetic in nature but encourages Hebrew readers in their belief in the God of Israel, strengthening them in their identity and urging them to trust in their God. This offers "a completely different view of the world, God and humanity."

Turning then to the larger literary structure of the Hebrew scriptures, Van Moere's analysis identified the "Enneateuch," which includes the five books of the Pentateuch plus the books of Joshua, Judges, Samuel, and Kings, in a larger literary narrative of Israel's history that might have been composed by either one author or a group of scholars or editors. If we accept this larger structure, the books would have been composed or compiled after the fall of Jerusalem in 586 BCE, which fits at the end of this large narrative. This gives an insight into the context and concerns of the authors and audience of these narratives. It was an experience of great national loss and faith trauma, giving rise to urgent questions about the God they claimed and the future of their people. As such, these nine scrolls provide answers, comfort, and hope in re-telling these narratives.

Reading these texts with an understanding of this context and hearing it in the voice of a pastor and educator, the narratives affirm the power and trustworthiness of their God and their special role as God's people. Van Moere urged that reading the Creation narrative in isolation from this larger literary context can lead to "an inadequate and even contrary interpretation of the first Creation narrative."

Van Moere concluded that the Creation account of Genesis 1:1–2:4a should not be read literally or as a religious myth; instead, it is narrative theology. It should be understood as an affirmation of faith in God, without detailed or scientific information of the how and when of Creation. It also assigns specific roles to human beings in

this created world. Van Moere argued that approaching this text with scientific questions several thousand years later is inappropriate, and that using this text as a basis for debate between proponents of young-earth creationism and older-earth creationism—or even a debate between creation and evolution—is pointless.

Conference Papers

When the "Age of Life on Earth" conference hosted by Sydney Adventist Forum convened in person and by livestream on June 12, participants quickly realized they were encountering serious science. They had been eased into it by more accessible presentations on Friday evening, June 11, beginning with an affirmation of the common faith of conference participants coming from two of the theologians in the room, in the form of the welcome by Dr. Ray Roennfeldt and prayer by Dr. Norm Young. But after that the program was almost entirely handed over to the scientists.

As one participant commented, this conference gave some of us not used to this world the opportunity to hear and observe "serious scientists going about their business of finding out about our world." As would be expected from a group of committed research scientists drawing on their respective areas of research and expertise, many of the presentations had a unique focus on aspects of Australia's landscapes and natural history, which brought freshness to some of the usual "creation science" themes. The converging evidence and collective weight of the presentations seemed to build a strong case for an older age of life on earth, but with little attention from most of the presenters as to the faith implications of their conclusions.

But the afternoon program was punctuated by a panel discussion involving all the conference presenters, including Dr. Rudy van Moere, online from Antwerp for a 15-minute cameo that largely recapped his pre-recorded presentations. Turning to the conference presenters in the room, discussion chair Dr. Graham Stacey added up the 400 years of denominational service among the presenters. And it was in this context that there was perhaps the most direct response to the central tension of the conference—how faith can be sustained in the face of the accumulated evidence for an old age of life on earth—to which a number of presenters expressed their personal

experiences of faith amid the challenges that have come with their own research.

In a recent article in the *Adventist Review*, Ben Clausen of the Seventh-day Adventist Church's Geoscience Research Institute wrote about the opportunities to build relationships with scientists who approach science in different ways and reach different conclusions. He set out a workable formula for faithful scientists of whatever persuasion: "learn from history, know the issue, do good science, study large-scale geology, recognize human limitations, and always love others."

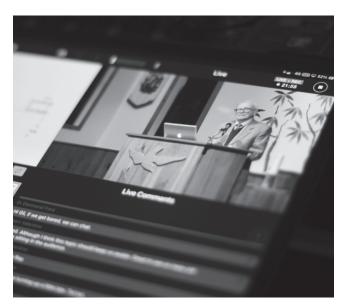
Most of the presenters at the "Age of Life on Earth" conference would fit this description, although a couple of the presenters used language that might be perceived as mocking other scientists who have reached different conclusions. Labeling "creationist's crackpot ideas" as such is not helpful, even if such labels might sometimes feel appropriate to describe the more dogmatic and jumbled arguments used to "defend" creationism.

While the weight of evidence presented at this conference built strongly across the presentations, the lack of diversity among presenters and viewpoints was obvious. Ironically, perhaps the heavy scientific focus of the event belied its more pastoral intent of including these scientists in a "safe" church environment and making the case for their place in this community of belonging.

As conference convenor Dr. Lynden Rogers explained, this might have been less by design than a result of invitations that were not accepted by other potential contributors. This ongoing conversation would be stronger with broader input, not only from more divergent scientific views but also from theologians and philosophers, pastors and educators, who would do more of the necessary work regarding the implications and understandings for how we can better believe and worship together a God who, in a core of Adventist Christian faith, is unequivocally defined as Creator (see Hebrews 11:3). The science is important; the theology is essential.

"God's Footprints" by Dr. Kevin de Berg and Dr. Ewan Ward

Avondale University College Associate Professor Kevin de Berg (retired lecturer in chemistry) presented a paper that included contributions from Dr. Ewan Ward (retired lecturer in biochemistry and microbiology), beginning



Dr. Kevin de Berg as seen on the livestream from the "Age of Life on Earth" conference on Friday evening, June 11

with an overview of the scientific arguments for design, including the more recent renewal of these arguments in recognition of the "fine-tuned universe" cosmology. The presentation gave an overview of the commonly understood cosmological timescale across the believed 13.7 billion years since the big bang, and introduced Christian apologists such as Francis Collins and Alister McGrath, who have adapted their scientific and theological understandings to this timescale because of the science that supports it. De Berg went on to present a number of specific examples of fine-tuned chemical processes that were necessary for life. "This is design extraordinaire," he commented, and identified a number of processes that are simply not understood. However, he gave examples of how these processes are not always perfect and lead to sometimes macabre outcomes. Acknowledging the tensions created between deep-time and common Adventist chronologies, de Berg quoted an author of one of his textbooks from when he was an undergraduate student: "We should look for God's footprints in what we know, rather than what we don't know." What we do know, he reflected, is sufficient to ground our faith in the essentials—and what we don't know should humble us. He suggested that there might be a free creative process designed into the universe from its beginnings. This might not be comfortable in its process and some of its results, he concluded, "but we would have to marvel at the creative expression observed and the free will that is granted in the process."

Associate Professor Brian Timms presented two papers to Sydney Adventist Forum's "Age of Life on Earth" conference on June 11 and 12.

"Dating Quaternary Life" by Dr. Brian Timms

Compared to much of the complicated mathematics underlying various of the scientific presentations, Associate Professor Brian Timms (adjunct professor, Centre for Ecosystem Science,

University of New South Wales) offered the much simpler mathematics of counting-counting tree rings and soil layers, measuring river deltas, and exploring the sedimentary layers and speciation in lakes around the world, but particularly in the apparently ancient landscapes of Australia that have been the focus of his many years of study. As a specialist in the study of lakes, from the deep to the dry, Timms cited examples of different lakes around the world, but much of his research has focused on seasonal and dry lakes in Australia, samples of which he presented with fascinating details and obvious passion. Because lakes are isolated, the variety of species will be greater in correlation with the age of the lake, and this presentation compared different levels of speciation in some of these older lakes (many of which having species discovered by Timms himself). In conclusion, his simple mathematics led him to using trees to date life back to at least 15,000 years, patterns in lakes that date beyond 74,000 years, soil—which requires biological life for its formation—dated as old as 200,000 years, and some river deltas that stretch into the tens and even hundreds of millions of years. The dating added up to Timms' conclusion: "Creation is older than we thought."

Sabbath Morning – Colin Waters, Geoff Madigan, and Howard Fisher

Professor Colin Waters began the first presentation on Sabbath morning of the conference with the assertion that "dating the past is a complicated and technical business." For many participants, the ensuing detailed explanations, formulae, diagrams, and charts would create more of an impressionist case than an understanding.

After Waters presented the theory of carbon-14 dating, Dr. Geoff Madigan shared the practical process by which samples are collected, analyzed, and dated. But this brought another sheaf of equations, statistical analyses,



abbreviations, and metrology—the science of measurement. However, the explanations of how to analyze specimens brought some insight into the painstaking process by which the dating is undertaken and how this varies for different substances such as wood, bone, or cellulose. The presentation acknowledged the risk of inconsistency in such

dating and potential variations in results, both by contamination or processes and calibrations, but that with increasing laboratory rigor with proper selection and handling of specimens, this can be a useful method of dating specimens as old as 50,000 years.

Dr. Howard Fisher began with a definition of biogeography as the study of the distribution of living organisms, the search for patterns of such distribution, and seeking to understand the reasons for this distribution. He then turned to the taxonomy of marsupials, both living and in the fossil record, commenting that "paleontologists have almost as many arguments as theologians." And then the presentation turned to plate tectonics and geological understanding of the often mischaracterized "continental drift," demonstrating the believed corridor linking the marsupials of Australasia and South America across the Antarctic continent. Fisher traced the fossil-recorded migration of marsupials from the Northern Hemisphere to the Southern Hemisphere with changing climates over the epochs. He also reinforced the biogeographical links between eucalyptus and other plants in the Gondwanan distribution between Australasia and South America. The presentation concluded that plate tectonic theory is the best explanation of this evidence and is a characteristic feature of this planet, which necessarily implies a great age for the continents and the fossils embedded in them. "The geography of marsupials is difficult to explain by other means," according to Fisher.

"Theological Problems for an Old Age of Life" by Dr. David Thiele

Filling the "divine hour" of the traditional Adventist worship service, the late-morning session began with singing before the introduction of Dr. David Thiele—a long-serving theology lecturer at Pacific Adventist

A pastoral response: Dr. David Thiele addressed some of the faith questions and challenges on Sabbath morning, June 12.

University—as the "preacher of the hour." As the title suggests, his presentation canvassed reasons that are often urged as theological imperatives for maintaining belief in youngearth Creationism, including the questions

regarding the inspiration and authority of Scripture, moral and ethical grounding found in the story of Creation, the Fall and the story of redemption, the Bible's later references to the historical figure of Adam, the possibility of death before the Fall and what that means for the character of God, and the particularly Adventist concern of the foundation of Sabbath. The presentation offered brief counterarguments to some of these objections but seemed to assume that this was largely a question of how the Creation narrative is read. One intriguing rhetorical question he offered: "What did Genesis 1 mean before Darwin came on the scene, before it was an answer to evolution?" More briefly, Thiele surveyed the arguments that old-earth proponents sometimes offer and summarily dismissed most of them as unsupported in the Bible itself or as a logical understanding of scientific reading of the Creation narrative. "All the arguments have loose ends, things that won't tie off neatly," he reflected. "There are more questions than answers." If he seemed to have let off the old-earth scientists too easily from the theological problems, he made his pastoral concern clear when participating in the panel discussion later in the day, urging that he wants to make and hold space for sincere scientists in their community of faith. Thiele concluded his presentation with a list of affirmations that must be maintained for Christian faith, whether adopting a short or long view of the age of life on earth, including that God is creator but our experience is now of a fallen world in which God has intervened and His salvation



will be achieved—of which Sabbath remains an important and universal symbol and foreshadowing.

Dr. Terry Annable on Ice Core Dating

Dr. Terry Annable's academic qualifications are in the field of human biology, but he has a strong

interest in broader natural history. Among his scientific interest is Australia's ongoing research in the Antarctic, with a current budget of A\$2.65 billion devoted to studying ice cores, particularly focused on what they might teach about changing climates. He explained the construction of ice formations, with layers added but then compressed by later layers, holding traces of dust, bacteria, gases, and more. The study of ice cores is a painstaking process and is done under careful conditions. The deepest ice core studied is 3.7 kilometers (more than 2 miles), with differences in the ice observable as the depth increases. Annable also shared fascinating glimpses of lakes under the Antarctic ice that have been cut off from the outside world for long periods of time. He pointed to bacterial and fungal spores in ice cores dated between 500 and 157,000 years old. The presentation highlighted recent ice cores that include fossilized vegetation from what appears to be a temperate rainforest that have been dated to 90 million years ago, before quickly skipping over the chemical analysis of these ice cores. His conclusions included that "the earth is unequivocally very ancient," with ice dated to 2.9 million years and older ice expected to be found. The ice cores provide evidence of flowering plants and fungi around 1.5 million years ago. He argued that Noah's flood did not reach the polar regions, but that there is evidence of recurring ice ages and variations in carbon dioxide, global temperatures, and sea levelsas he sounded the alarm about the recent and largely unprecedented upswing in all of these.

While Timms acknowledged that some of the "dinosaur people" exercise enthusiastic imagination at times and was critical of some aspects of dinosaur science, he also criticized some defenders of creation for their "creative" ways of trying to explain dinosaurs.

"Dinosaur Mysteries" by Dr. Brian Timms

This presentation began with an overview of the family tree of dinosaurs and their distinctive characteristics, with about 800 species currently identified. Timms explained how scientists can reconstruct a dinosaur from just a few bones and gave an overview of how Christian creationists have responded to dinosaurs: beginning with denying their existence, which is now untenable; explaining dinosaurs as not created by God but arising from amalgamations of species (described by Timms as a uniquely Adventist perspective, drawn only from the writings of Ellen White, but he pointed out that she seemed to move away from this idea in later writings); or created by God but destroyed by the flood, which would mean that dinosaurs and humans co-existed at some time. But he described the most common understanding that dinosaurs lived long before humans (dating dinosaurs from about 250 million years to 65 million years ago) and might or might not have been created by God. He pointed out that dinosaur fossils and footprints have never been found with contemporaneous evidence of human beings. While Timms acknowledged that some of the "dinosaur people" exercise enthusiastic imagination at times and was critical of some aspects of dinosaur science, he also criticized some defenders of creation for their "creative" ways of trying to explain dinosaurs. After considering the theory for the ultimate extinction of dinosaurs about 65 million years ago, Timms expressed his reluctance to believe that God created monster-like dinosaurs. "As a Christian and as a scientist of 50+ years' experience, it is easiest for me to believe that dinosaurs were created in a past age," he reflected, suggesting that there might have been a series of creations in the different geological ages.

"Mary Schweitzer and Dinosaur Soft Tissues" by Dr. Paul Cameron

While most of what we know about dinosaurs comes from bones, the availability of soft tissue to be preserved in fossils would allow analysis of proteins and DNA, which in turn would allow greater understanding of the relationships between species. Cameron (medical doctor and associate professor, University of Melbourne) talked about the nature and formation of fossils, before introducing conference participants to Mary Schweitzer, a Christian and a scientist who has studied fossilized dinosaur bones



Dr. Geoffrey Madigan presented aspects of radiometric dating on June 12.

at the University of Montana since the 1990s. Her work has been able to identify soft tissues in Tyrannosaurus Rex bones, but this has created controversy among scientists, and Cameron reflected that this is still a developing field of scientific research. The outcomes of Schweitzer's work were not expected by scientists and have been used by some young-earth creationists to argue against the older age of dinosaur fossils. Cameron highlighted the process of the science with a quote from Schweitzer: "I have a lot of respect for people who wouldn't just immediately accept our results." Changes in scientific thinking require data that is accurate, reproducible, and published, and Cameron concluded with the challenge to produce stronger evidence to refute the current understanding of dinosaurs.



NATHAN BROWN is an author and journalist, as well as a book editor at Signs Publishing Company, based in Melbourne, Victoria. He attended the "Age of Life on Earth" Conference as a guest of Sydney Adventist Forum, although via livestream because of COVID-19 travel restrictions, and reports on the event in the capacity of an independent journalist.