



The aetosaur, which lived more than 200 million years ago, was a reptile related to crocodiles and dinosaurs (artist's impression).

Fossil reptiles mired in controversy

An ethics row has broken out among palaeontologists over the naming of aetosaurs, a type of ancient armoured reptile.

Doctoral students in the United States and Poland are accusing scientists at the Albuquerque-based New Mexico Museum of Natural History and Science (NMMNHS) of publishing articles that allegedly pilfered their research. The allegations concern three articles published in the *NMMNHS Bulletin* by the museum's interim director Spencer Lucas, former director Adrian Hunt and their co-authors.

The disputed articles name and describe different aetosaurs, and detail how the 220-million-year-old reptiles are related to crocodiles and dinosaurs. In one instance, Lucas, Hunt and Justin Spielmann, the museum's geosuchid collections manager, are accused of rushing to publish a new name for an aetosaur (*Rioarribasuchus*)¹ when they allegedly knew that palaeontologist William Parker of the Petrified Forest National Park in Arizona was soon to publish an article naming the species (as *Heliocanthus*)².

The International Commission on Zoological Nomenclature says scientists must not name species if they know a competing scientist is in the process of doing so. Lucas denies knowing of Parker's plans. Hunt, who left the museum last July to head the Flying Heritage Collection being set up by Microsoft co-founder Paul Allen in Everett, Washington, did not comment.

And last July, Jerzy Dzik of the Palaeobiology Institute at the University of Warsaw sent Lucas an e-mail in complaint after Lucas published an article in the *Bulletin* describing Polish aetosaur fossils³. The article appeared shortly after Lucas had visited the Warsaw Institute, when the fossils were close to being described by scientists there. Such a thing had not occurred in the past 50 years at his institute, Dzik wrote, adding: "Your action

was harmful to many young researchers."

In an e-mail response to Dzik, Lucas blamed the Polish researchers for not being more explicit about their fossil-examination rules, but he did apologize for what he called "a misunderstanding".

Another article published in the *Bulletin* by Spielmann and his bosses involves a reinterpretation of an aetosaur called *Redondasuchus*⁴. Jeff Martz, a palaeontology doctoral student at Texas Tech University in Lubbock, says this reinterpretation — involving bony spikes along the animal's back — failed to properly credit his own similar description in a master's thesis, an act akin to plagiarism.

In a letter of complaint sent in 2007 to New Mexico government officials, Martz, Mathew Wedel of the University of California at Merced and Michael Taylor of the University of Portsmouth, UK, wrote: "It is our strong suspicion the [New Mexico Museum team members] deliberately abused their editorial powers to take credit for observations and insights of Parker and Martz." Such actions, the letter argues, corrupt the scientific process and harm young researchers. Because Lucas largely edits the *Bulletin*, he and his team have been able "to

mass produce essentially self-published and non-peer-reviewed papers", the letter claims.

Lucas is known in the palaeontology community for his desire to publish a high volume of papers. He acknowledges that his "tough" approach has brought him into conflict with researchers before. "They are obviously angry," he says, but the complaint "doesn't have any substance".

The New Mexico cultural-affairs department, which oversees the museum, conducted a review of two of the instances last October and concluded that the allegations were groundless. But some experts call that review a whitewash, claiming that it failed to follow accepted practices of US academic institutions faced with claims of misconduct. Now all three cases are before the Ethics Education Committee of the Society of Vertebrate Paleontology, a professional organization based in Northbrook, Illinois, which is awaiting responses from the New Mexico team before making a ruling.

"What we sought is a point-by-point response to our allegations," says Martz. Attorneys for New Mexico state blocked such a response, according to Peter Gerity, vice-chairman of the museum's advisory board who is also vice-president for academic affairs at New Mexico Tech in Socorro. Gerity says he helped review the 2007 letter of complaint, which was rejected. Gerity told *Nature* he was unaware of the Polish criticism.

With Lucas now seeking to become permanent director of the New Mexico museum, the publishing debate isn't expected to go away. ■
Rex Dalton



Interlocking bony plates covered the aetosaur's body, shown one-third of actual size.

1. Lucas, S. G., Hunt, A. P. & Spielmann, J. A. *NMMNHS Bull.* No. 37, 581-582 (2006).
2. Parker, W. G. *J. System. Palaeontol.* **5**, 1, 41-68 (2007).
3. Lucas, S. G. *et al.* *NMMNHS Bull.* No. 41, 248-258 (2007).
4. Spielmann, J. A. *et al.* *NMMNHS Bull.* No. 37, 583-587 (2006).