

DR. SPENCER LUCAS

WRITTEN RESPONSES ON ALLEGATION

SUGGESTIONS TO IMPROVE THE NMNHS

BULLETIN

ON PARKER'S ACCUSATION OF "CLAIM JUMP"

A series of letters written by William Parker of the Petrified Forest National Park in Arizona and other letters written by Jeffrey Martz, Matthew Wedel and Michael Taylor (hereafter Martz et al.) accuse research staff at the New Mexico Museum of Natural History and Science (hereafter NMMNH) of rushing to publish an article that named a new kind of aetosaur in order to "claim jump" or "scoop" Parker, who had an article in press proposing a new name for the same aetosaur. The individuals accused are Spencer Lucas, Interim Executive Director; Adrian Hunt, former Executive Director; and Justin Spielmann, Geosciences Collections Manager and Registrar (hereafter referred to as Lucas, Hunt and Spielmann).

The article in question is: Lucas, S. G., Hunt, A. P. and Spielmann, J. A., 2006, *Rioarribasuchus*, a new name for an aetosaur from the Upper Triassic of north-central New Mexico: New Mexico Museum of Natural History and Science Bulletin 37, p. 581-582. Hereafter this article will be referred to as Lucas et al. This article was based on fossils collected by NMMNH personnel and prepared and repositied in the NMMNH collection.

The chief claim of Parker and Martz et al. is that Lucas, Hunt and Spielmann knew Parker had a paper in press that named a new genus of aetosaur and decided to beat him to print by publishing their own name for the same aetosaur in the NMMNH Bulletin, a publishing outlet that has a much quicker editorial and publishing process. Both the Parker and Martz et al. letters have similar content, including a number of assumptions and accusations against Lucas, Hunt and Spielmann.

The key accusations and assumptions are:

- That Lucas, Hunt and Spielmann knew that Parker intended to provide a new name for *Desmatosuchus chamaensis* and that they had knowledge of Parker's forthcoming paper due to his published abstracts in which he demonstrated that *Desmatosuchus chamaensis* was going to be given a new name in a future publication.
- That the paper by Lucas et al. was not extensively peer reviewed, as if it had been, then Parker's intentions to name a new genus would have been made clear to Lucas et al. by the reviewers.
- That with this knowledge, Lucas, Hunt and Spielmann fast-tracked a paper to beat Parker to naming a new genus.
- That Lucas, Hunt and Spielmann's renaming of the material was not based on independent research.
- That Parker had full permission and rights to examine, photograph, describe and

publish on the aetosaur material in the NMMNH collection.

However, to address every accusation made in Parker's letter, we will answer every allegation and all statements that we consider to be false or ambiguous in the order in which he presents them.

RESPONSE

First, we should clarify the background of the Lucas et al. (2006) paper as well as other relevant factors.

In late December of 2006, the Lucas et al. article titled "*Rioarribasuchus*, a new name for an aetosaur from the Upper Triassic of North-Central New Mexico" was published in NMMNH Bulletin #37. This article was written by NMMNH scientists about fossils NMMNH collected, prepared and has repositied in its collections.

Previously, *Rioarribasuchus* was called *Desmotosuchus chamaensis*, a name given by Zeigler, Heckert and Lucas (hereafter Zeigler et al.) in a paper published in a NMMNH Bulletin in 2002. Please note that Parker erroneously references its publication date as 2003.

Indeed, the review process of NMMNH Bulletin 37 was the one also used by other publications, such as the New Mexico Geological Society, American Museum of Natural History and Indiana University Press. In other words, authors were asked to seek two reviews of their paper, to revise in light of these reviews, and submit the revised manuscript with the review.

In 2007, Parker published an article in The Journal of Systematic Paleontology naming the same aetosaur *Heliocanthus*. Parker's paper is almost entirely based on NMMNH fossils collected at the Snyder Quarry, a site that NMMNH continues to excavate and study. We did not know that Parker had written this paper, submitted it to a journal and that it was in press simply because neither he nor anybody else informed us of his paper's existence. Furthermore, we did not suspect he would write a paper on fossils he knew us to be actively studying without contacting us first.

Parker (2007) appeared online in January 2007, but was not actually published until March 2007. So, Parker's statement that his paper was released one week after Lucas et al. is technically correct, as the two papers were actually published about four months apart.

As per Parker's telling:

1. "Shortly after the New Mexico Bulletin was released I contacted Dr. Lucas and asked him about his article: he replied that the *Rioarribasuchus* paper is based on his independent discovery that the fossil belonged to a new genus rather than the genus *Desmotosuchus*."

In January 2007, shortly after NMMNH Bulletin 37 was released, Parker indeed contacted Lucas by telephone. However, the conversation between Parker and Lucas was not about what Parker claims. Rather, the conversation was about the actual publication dates of Lucas et al. and of Parker's soon to be published paper and our mutual surprise about the existence of both papers.

After the January conversation between Lucas and Parker, Lucas heard nothing more about this until April, when Darren Naish's defamatory blog (see attached) was brought to the attention of Hunt and Lucas.

2. "When I notified him of my impending paper he claimed that he had no knowledge that I intended to provide a new name for this animal."

This is not true. What was really said by Lucas was that he and his co-authors (Hunt and Spielmann) were unaware that Parker had written an article proposing a new genus name, much as Parker was unaware of our paper. In reality, the conversation ended on a conciliatory note. Parker and Lucas were both surprised that the other had written an article naming the aetosaur and that the two articles were published very close together in time. Indeed, had Parker's article appeared first, Lucas, Hunt and Spielmann would have been disappointed, but would have conceded that Parker's name had priority.

In his letter, Parker goes on to give the several reasons why he found Lucas' comments disturbing based entirely on what he says was discussed during their conversation, which again, is not accurate. Nonetheless, we will continue to discuss Parker's observations in detail:

3. "After the first *Desmotosuchus chamaensis* paper was published in the Spring of 2003 by Dr. Lucas and colleagues I visited the NMMNHS museum collections and examined the material first hand."

Parker claims that in the Spring of 2003 he visited the NMMNH collection. However, the NMMNH collection visitor log indicates that Parker visited the collection on 23 February 2001 and on 30 May 2002. At that time, he was working on his master's thesis on a large aetosaur skeleton from Arizona in the collection of the Museum of Northern Arizona. Parker visited the collection again in 2006 and 2007, as recorded in the visitor log. However, there is no record of Parker visiting the NMMNH collection in Spring 2003.

4. [During his alleged NMMNH visit in the Spring of 2003] “I discussed with several of the staff that I did not feel that the specimens belonged to *Desmatosuchus* but instead were more like an animal called *Paratypothorax*.”

Who are the NMMNH staff members with whom he discussed this? Lucas, Hunt and Spielmann were never informed of these supposed conversations. Also, if in fact true, this also suggests that Parker may have considered *Desmatosuchus chamaensis* to belong to *Paratypothorax*. But again, the real question is “who” exactly did he talk to? It certainly was not Lucas, Hunt or Spielmann.

5. “A few months later, Dr. Andrew Heckert (then collections manager of the NMMNH&S), Lucas, and colleagues released another paper in a NMMNH&S Bulletin that repeated the claims that the specimens represented *Desmatosuchus*.”

As Parker indicates, a few months later after his putative visit, Heckert, Zeigler and Lucas published another paper in a NMMNH Bulletin, and, at that time, Heckert et al. still assigned the aetosaur material to *Desmatosuchus chamaensis*. This further demonstrates that NMMNH staff continued to research and publish on Snyder Quarry fossils.

6. “In my Master[s] Thesis completed in December 2003 I referred the specimens in question to a new genus which I named *Heliocanthus*.”

That may be the case, but Lucas, Hunt and Spielmann do not have a copy of Parker’s masters thesis and have never read it. See response 7 below for further discussion.

7. “Dr. Heckert and other staff at NMMNH&S were notified of the release of my thesis and sent a copy for their library.”

While Parker may have had communication with Heckert and perhaps even sent a copy of his thesis to Heckert, a thorough examination of the Collection library of the NMMNH, as well as the extensive reprint library of Lucas, reveals that the NMMNH does not have a copy of Parker’s thesis, either electronically or as a hard copy.

It is possible that Heckert took his copy of Parker’s thesis with him when he left to take a teaching position at Appalachian State University in July of 2005. In which case, Heckert was the only one to have had a copy of Parker’s thesis, a document that was never circulated to the rest of the researchers in the NMMNH Geoscience Department.

Based on the lack of any of the authors of Lucas et al. (2006) having a copy of Parker’s thesis and no indication of a forthcoming name from Parker in any of his subsequent articles (see below), there was no way for any of the NMMNH staff involved

to have known Parker's intention to publish his name.

8. "I also published an abstract in the Journal of Vertebrate Paleontology (to which Dr. Lucas subscribes) and gave a talk at the Annual Meeting of Society of Vertebrate Paleontology in late 2003 where I noted that *Desmotosuchus chamaensis* represented a new genus."

Parker infers that because Lucas, Hunt and Spielmann subscribe to the Journal of Vertebrate Paleontology they must have read his abstract (2003). Assuming that indeed Lucas, Hunt and Spielmann read the abstract, Parker's abstract simply "notes" that *Desmotosuchus chamaensis* represented a new genus. There is no indication in Parker's abstract that he planned to give it a new name.

Parker also infers that because he gave a talk at the Annual Meeting of the Society of Vertebrate Paleontology, Lucas or any of his research associates were present and therefore should have presumed that his observation that *Desmotosuchus chamaensis* represented a new genus translated to his plan to give it a new name. Lucas, Hunt and Spielmann did not attend Parker's talk.

9. "This information was also published in a second abstract in 2004 by Stocker et al. which is frequently cited by NMMNH&S staff in their publications."

Parker's assertion leads to his and Martz et al.'s assumption that Lucas, Hunt and Spielmann had knowledge of Parker's forthcoming paper and of his intent to name it a new genus based on the publication of Parker's second abstract (Stocker et al., 2004) where once again he "notes" that *Desmotosuchus chamaensis* represented a new genus. But, again he fails to indicate that he plans to give it a new name. Furthermore, Lucas, Hunt and Spielmann have not frequently cited that abstract.

10. "In numerous papers from 2003 through 2005 Dr. Lucas and colleagues continued to insist that the material belonged to *Desmotosuchus*."

Parker maintains that Lucas, Hunt and Spielmann "continued to insist" that the material in question belonged to *Desmotosuchus*. In reality these are articles where Heckert is senior author. It should be noted that Heckert et al. "referred" to it as *Desmotosuchus*, but "insisted" seems too strong a word.

Again, this indicates that, at that time, Heckert et al. still assigned the aetosaur material to *Desmotosuchus chamaensis*.

11. “In 2005 I published an invited paper in a NMMNH&S Bulletin (edited by Dr. Lucas) where I reiterated that this material belonged to a new genus. Dr. Lucas was a reviewer of that paper and his written (dated and signed 4/2/05) comment to my statement was that he did not agree with my assessment.”

In the above proclamation, nowhere does Parker make any specific mention of his intentions to name *Desmatosuchus chamaensis* as a new genus. All Parker does, repeatedly, is to “note” that the animal represents a new genus.

Additionally, the Parker and Martz et al. letters also claim that in various publications Parker had indicated that he did not think the species *chamaensis* belongs to the genus *Desmatosuchus*, in particular by listing it as “*Desmatosuchus*” *chamaensis*.

As for the suggestion that we were aware that Parker had published notification that he was naming a new taxon, it simply is not the case.

In Parker and Irmis (2005), a publication by Parker in NMMNH Bulletin 29, a publication series he would go on to refer to derogatorily as “grey literature,” he briefly discusses *Desmatosuchus chamensis* and that it “represents a distinct genus” (p. 50), but does not provide any further discussion or indication that he would be providing a new name for the specimen in the future.

Indeed, Lucas et al. on page 581 referenced one such publication (Parker and Irmis, 2005) to indicate agreement that it should be assigned to a different, new genus. However, the publications of Parker available to Lucas, Hunt and Spielmann when Lucas et al. was written did not indicate he was naming a new genus for *Desmatosuchus chamaensis*, but simply that he questioned its assignment to *Desmatosuchus*. Moreover, since NMMNH scientists were working on the Snyder Quarry aetosaurs, and Parker knew it, we never thought he would publish on them without first contacting us.

As for disagreement with Parker’s assessment that *Desmatosuchus* belonged to a new genus, at the time Lucas et al. continued to believe the material to represent *Desmatosuchus*.

12. “My submitted manuscript also noted that I had a paper in preparation dealing with this problem.”

This statement is indeed misleading. The “in press” aetosaur article mentioned in the article deals with “a new species of *Desmatosuchus*” under the *D. haplocerus* heading. No “in press” citations are under the *Desmatosuchus chamaensis* heading. The “in press” refers to an article published later on *Desmatosuchus smalli*, and has no relation to *Desmatosuchus chamaensis*.

13. “A paper published by Drs. Heckert, Lucas and Hunt in the same bulletin acknowledged my differing opinion but still considered the material to represent *Desmatosuchus*.”

The reason for the repeated assignment is that, at that time, Heckert et al. still assigned the aetosaur material to *Desmatosuchus chamaensis*, based primarily on the observations and conclusions of Heckert.

14. “My manuscript renaming this material *Heliocanthus* was accepted for publication by the Journal of Systematic Paleontology on December 2, 2005 and was in press until its release the first week of January in 2007.”

Parker’s above statement raises the question of why didn’t he simply tell Lucas et al. about the in-press article on specimens in the NMMNH collection? Parker had communicated with Lucas et al. at various times via telephone and email, so it could not have been for lack of contact information.

Moreover, Parker attended the 7th Federal Fossil Conference held in Albuquerque on 22-23 May 2006, and gave a presentation on the second day (he also visited the NMMNH collection). During this conference, Parker spoke to Lucas and Spielmann, and even though it had been over a year since his paper was submitted, and it had had been in press for about six months at that point, Parker still did not mention the upcoming article to Lucas or anyone else on the NMMNH staff.

Furthermore, in the Fall of 2006, Hunt and Lucas visited the Petrified Forest National Park to go in the field. Parker went with Lucas and Hunt and the three of them talked extensively, but he never mentioned the existence of his in-press paper.

15. “During this time I made no secret of my intentions or the name I was providing to NMMNH&S staff.”

Actually, even the title of Parker (2007) (“A re-analysis of *Desmatosuchus chamaensis*...”) does not explicitly indicate a renaming of *Desmatosuchus chamaensis*. The fact is that at least 6 people did not know of Parker’s paper: Lucas, Hunt, Spielmann, the two reviewers of Lucas et al. (Sullivan and Rinehart) and the principal editor of Bulletin 37 (Harris). All saw the Lucas et al. paper before it was published, and had any known of Parker’s in press paper they would have stopped publication of Lucas et al. to avoid the duplicative naming.

Parker has claimed that he told Heckert that his paper was in press, but Heckert never shared this information with Lucas, Hunt or Spielmann (note that Heckert left NMMNH for a new position in North Carolina in July 2005). We have since asked Heckert about Parker’s claims, and he denies Parker ever telling him of the paper in press. All the same, it would have been appropriate of Parker to inform the Collections

Curator, Spencer Lucas, which he did not.

16. "The name was listed on the Petrified Forest National Park website and used in exhibits at that institution."

Lucas, Hunt and Spielmann did not visit either website or the exhibit before 2007. And, why would Parker put an unpublished scientific name on a website or in an exhibit and create a *nomen nudum*?

17. "Dr. Lucas' paper was released the last week of December 2006. It consists of only a few paragraphs, was not extensively peer reviewed, and cites my 2005 paper as authority for providing a new genus name for this material."

Notice, incidentally, that the focus is on "Lucas," not on Lucas, Hunt and Spielmann. Two reviewers, Larry Rinehart of the NMMNH and Robert Sullivan, of the State Museum of Pennsylvania, Harrisburg, PA, are acknowledged by Lucas et al. (2006) for their reviews. Jerry Harris, the head editor of Bulletin 37, saw all the articles in the volume before they were published. So, when Lucas et al. went to the printer, six people (Lucas, Hunt, Spielmann, Rinehart, Sullivan and Harris) had seen it and were clearly unaware of the existence of Parker's article naming the same aetosaur.

As pointed out by the critics of the NMMNH bulletin series, peer review by qualified researchers helps to prevent duplication of effort. Collectively, Lucas, Hunt and Heckert have published many articles on aetosaurs, particularly from New Mexico and the American Southwest, in both local, national and international publications. All three are acknowledged experts on these animals, yet, curiously, Parker's (2007) paper was not sent to any of them for review. If Parker's (2007) paper had been reviewed by one of these qualified reviewers, then Parker's intention would have been known, thus avoiding the current dispute.

Lucas et al. on page 581 referenced one of Parker's publication (Parker and Irmis, 2005) to indicate agreement (not as "authority") that *Desmotosuchus chamaensis* should be assigned to a different, new genus. However, the publications of Parker available to Lucas, Hunt and Spielmann when they wrote their paper did not indicate he was naming a new genus for *Desmotosuchus chamaensis*, but simply that he questioned its assignment to *Desmotosuchus*. Moreover, since NMMNH was working on the Snyder Quarry aetosaurs, and Parker knew it, we never thought he would publish on them without first contacting us.

Nonetheless, we made a mistake in that we never explicitly told Parker not to publish on our specimens. We have always had a very liberal policy about collection access, and we assumed that Parker would respect our priority in publishing on our own specimens.

18. “Furthermore, this was published in a NMMNH Bulletin that he co-edited, so he had the opportunity to “fast-track” the publication of his paper so that it would appear before my contribution.”

This is simply not true. The volume in which Lucas et al. (2006) appeared (NMMNH Bulletin 37) was edited and worked on by NMMNH staff and other contributing editors/authors beginning in late 2005 and ran almost the entirety of 2006. Lucas et al. (2006) was written in July of 2006. It thus was not “fast-tracked” or given any type of preferential or special editorial treatment. Lucas et al. was a very short paper (a note simply proposing a new generic name for an already named species) so it went through review, editing and setup rather quickly, which is not unusual for a paper of that length. If at any time Parker’s work had been made known to Lucas, Hunt and Spielmann, the article would have been removed from the volume and never published.

19. “Thus, it seems clear based on Dr. Lucas’ citing of my 2005 paper that his renaming of the material was not based on his independent discovery.”

By early 2006, Hunt and Spielmann convinced Lucas that *Desmatosuchus chamaensis* should be assigned to a new genus. The fact is that earlier assignment to *Desmatosuchus* was a joint decision of Zeigler, Heckert and Lucas and did not involve Hunt and Spielmann. In Lucas et al., the Parker and Irmis paper was cited as an indication of agreement that the material represented a new genus. We did this to give credit to Parker for stating that *Desmatosuchus chamaensis* did not belong to *Desmatosuchus*.

20. “Furthermore, my intent was clear and had been circulating since 2003 and was known to colleagues of Dr. Lucas; he must have known of my intent because of his comments as a reviewer of my 2005 paper.”

Indications of future studies occur frequently in the scientific literature, e.g., Spielmann et al. (2007) in a paper on the preliminary results of a study they were later planning to expand into a monograph, simply stated in the introduction to the paper (p. 231) that “The current paper is part of a larger study being undertaken by the authors (Spielmann et al., in prep.) that will...” No such declaration was provided by Parker in any of his publications available to us prior to his 2007 article (Parker, 2007). Thus, this is nothing more than Parker’s assumption.

Indeed, if Parker had been proclaiming *Desmatosuchus chamaensis* a new genus since 2003, and our intent was to “steal” a new genus name from him, why did we wait until 2006 to do so? Actually, in 2006 we came to view *Desmatosuchus chamaensis* as a new genus, and we published a new name for it as part of our ongoing research on the aetosaurs we collected from the Snyder Quarry.

21. **“To underscore the seriousness of this situation I would like to point out that shortly after the publication of Bulletin 37 and my own paper, I was independently contacted by one of the “co-editors” of the volume who wanted to assure me that he was not directly involved with the publication of the *Rioarribasuchus* paper, wanting to dissociate himself from what could be perceived as a “claim jump”.”**

Parker does not identify who told him this and why they considered it a “claim jump.” Did this anonymous editor know of Parker’s paper and not share that information with us?

22. **“Subsequently, another co-editor apologized for the publication of the paper in a public blog discussing the issue. Neither of these editors is affiliated with the NMMNHS.”**

This was Jerry Harris, who confirmed on Naish’s blog that he was unaware that Lucas et al. would duplicate Parker’s naming, because Harris also was unaware of Parker’s paper in press.

23. **“Finally, this is not the first time that I have encountered a similar situation with Lucas and colleagues. In 2004 I made a discovery of skeletons of an animal named *Revueltosaurus callenderi*. This animal had previously been described as an early dinosaur by Dr. Adrian Hunt in 1989 and in subsequent publications, many authored with Dr. Lucas and other NMMNH&S staff. My 2004 discovery showed that *Revueltosaurus* was not a dinosaur but rather a form of early crocodile relative. I prepared a paper with colleagues and shortly before it was published (May 2005) gave a presentation on my findings at a paleontology meeting in Utah that was attended by Drs. Lucas and Hunt. One of their colleagues, Dr. Heckert, also cited me as a reference for the discovery in one of his publications in late 2004.”**

Revueltosaurus, named by Hunt in 1989, was a taxon discussed by various workers, including Padian and Sereno in addition to the articles Hunt, Lucas and Heckert wrote about it. Prior to 2005, *Revueltosaurus* was generally acknowledged as an early dinosaur by a majority of the vertebrate paleontological community. Parker discovered new (esp. cranial) material of *Revueltosaurus* at the Petrified Forest Park that demonstrated it was not a dinosaur.

24. **“In April 2005 Drs. Hunt and Lucas published an abstract claiming independent discovery that *Revueltosaurus* was a crocodile rather than a dinosaur and implied this again in a NMMNH&S Bulletin paper published later that year.”**

The 2005 abstract and paper are solely about an NMMNH partial skeleton that was originally described in Hunt’s 1994 Ph.D. dissertation as a new kind of non-dinosaurian reptile. Further preparation of this material showed that it had teeth of

Revueltosaurus morphology, so the abstract reported that the specimen indicated *Revueltosaurus* was not a dinosaur, but a crocodile relative.

25. “Although my discovery was cited in the latter paper, they used their April abstract as the primary authority for this discovery and suggested that their discovery was independent of mine.”

That is incorrect; we cited both the Parker et al paper and the Hunt and Lucas abstract to the effect that *Revueltosaurus* was a crocodile relative.

SUMMARY

Parker and Martz et al. claim that Parker’s intentions to publish a new name for *Desmatosuchus chamaensis* (Parker, 2007) were adequately known by Lucas and colleagues prior to the publication of Lucas et al. (2006).

We believe that the most parsimonious explanation of the facts known to us indicate that Parker went out of his way to not inform Lucas et al. of his intentions of publishing his article (Parker, 2007) on the NMMNH material despite his statements indicating the contrary. The appendix below raises worrying questions about how he obtained some of the data in his paper from the NMMNH collection. Moreover, this was material we were studying and we did not think anybody else would publish on it without first asking us, as is customary. Of course, we allowed him and others to freely study our specimens, and did not make it clear that we did not want them to publish on the Snyder Quarry aetosaurs. Again, that was our mistake.

Indeed, Parker is under the impression that we do not have the right to publish conclusions about fossils that NMMNH personnel collected, prepared, curated and described if those conclusions have also been reached by him.

In summation,

- As demonstrated above, Lucas, Hunt and Spielmann had no knowledge of the forthcoming Parker (2007) paper when they wrote Lucas et al. (2006), and no such indication was provided by Parker either verbally or via email or in writing to Lucas, Hunt or Spielmann.
- The fossils in question are NMMNH fossils and were under active study by NMMNH scientists before, during and after Parker’s visits to the NMMNH collection.

- Lucas et al. (2006) was seen by its authors, reviewers and at least one other editor prior to its publication and none of them were aware of Parker's in-press article.

Thus, Parker and Martz et al.'s criticisms of Lucas, Hunt and Spielmann are unfounded and in truth the only thing the NMMNH is guilty of is a too liberal collection-access policy and a lack of open communication with Parker.

APPENDIX

The underlying assumption in both the Martz et al. and Parker letters is that Parker was given complete approval to examine, photograph, describe and publish specimens housed at the NMMNH. This was not the case, but he was also not told he could not publish on the specimens. We just assumed he would not.

Specifically, fossil specimens relevant to this issue were collected from the Snyder Quarry in northern New Mexico, a site that has been excavated and researched exclusively by NMMNH staff and volunteers and continues to be excavated and researched by the NMMNH.

The NMMNH collection visitor log indicates that Parker visited the collection on 23 February 2001 and on 30 May 2002. At that time, he was working on his master's thesis on a large aetosaur skeleton from Arizona in the collection of the Museum of Northern Arizona. He was allowed to study our aetosaur collection for comparative purposes, which included many isolated armor plates from the Snyder Quarry that we were actively studying. NMMNH researchers soon published two articles on these aetosaurs (Zeigler et al., 2002; Heckert et al., 2003), assigning some of them to a new species we named *Desmotosuchus chamaensis*. Collecting at the Snyder Quarry has continued since, and more aetosaur material continues to be recovered.

In late 2004, Parker solicited Kate Zeigler, then a graduate student of Lucas and an associate of the NMMNH, to take pictures for him of some of the *Desmotosuchus chamaensis* material from the Snyder Quarry. Zeigler asked Lucas if this would be possible, but Lucas refused his permission on the grounds that the material was still under study.

At this time, Zeigler had unfettered access to the NMMNH collection and could easily have ignored Lucas' refusal and provided Parker with photographs. Though the previous sentence is conjecture, Zeigler at the time did express to Justin Spielmann, then a visiting researcher to the NMMNH, that she wanted to provide Parker with the photographs. When Parker next visited the NMMNH collection, on 22 May 2006, he was told that the Snyder Quarry aetosaurs were under study by NMMNH personnel and was not allowed to study the specimens.

In addition, Parker (2007, p. 19) acknowledges, “Randall Irmis, Sterling Nesbitt and Jeff Martz provided many of the photographs of the material [of “*Desmotosuchus chamaensis*].” This indicates that Parker solicited others for their pictures of material from the Snyder Quarry. This attempt, along with his request of Zeigler, appears to indicate that Parker attempted to procure images for publication without consulting any NMMNH staff, notably Lucas, who is in charge of the collection.

Thus, there is irony in Parker and Martz et al.’s accusations that Lucas et al. “stole” their intellectual property as it appears that Parker was obtaining information on fossils in the NMMNH collection through indirect means.

The following table demonstrates that Parker solicited photographs and data from other researchers who had visited or worked in the collection after his visit of 29 May 2002, specifically Martz, Nesbitt and Irmis, whom he acknowledges in Parker (2007) as providing photos, or Zeigler, whom he solicited for photos in mid-2004, as discussed above.

The table provides additional information for each of the NMMNH specimens listed by Parker (2007, p. 5) in his Table 1. For each entry in the table, the NMMNH specimen number is given, the date it was catalogued into the NMMNH Geoscience Paleontology Collection, whether it is referred to by Parker in Table 1 only or in additional figures (figure citations are included) and whether previous NMMNH publications (specifically Zeigler et al. 2002 or Heckert et al. 2003), photographically illustrate the specimen (figure citations are included).

In the right hand column, the Z02 and H03 refer, respectively, to Zeigler et al., 2002 and Heckert et al., 2003.

In the table:

Underlined entries are cases where Parker (2007) published photos of NMMNH material that was previously unpublished.

Italicized entries are cases where Parker (2007) published data on NMMNH specimens that were cataloged after his last recorded visit to the NMMNH collection in which he was permitted access to these specimens, on 5/29/02, and had not been illustrated in subsequent publications by NMMNH researchers.

Bold entries are cases where Parker (2007) has data on and photographs of NMMNH specimens that were cataloged after his last recorded visit to the NMMNH collection in which he was permitted access to these specimens, on 5/29/02, and had not been illustrated in subsequent publications by NMMNH researchers.

NMMNH Specimen Number	Date catalogued by NMMNH	Referred to by Parker in table or figures	Illustrated in previous NMMNH publications
4894	Not listed in catalog locality found 7/1/1986	Table only	Yes, in both Z02 fig. 2C and H03 fig. 6C
29045	2/2/1999	Both, fig. 5N	Yes, in H03 fig. 8B
31295	2/17/1999	Both, fig. 9A	Yes, Z02 fig. 2F and H03 fig. 6F
32793	9/13/2000	Both, fig. 5A-C	Yes, Z02 fig. 2D and H03 fig. 6D
<u>32794</u>	<u>9/13/2000</u>	<u>Both, fig. 8C-D</u>	<u>No</u>
32795	9/13/2000	Both, fig. 5J-L	Yes, Z02 fig. 2A-B and H03 fig. 6A-B
32796	9/13/2000	Both, fig. 10A	Yes, Z02 fig. 2G and H03 fig. 6G
32797	9/13/2000	Both, fig. 2D	Yes Z02 fig. 2E and H03 fig. 6E
33099	11/9/2000	Both, fig. 5G-I	Yes, Z02 fig. 2J and H03 fig. 6J
33100	11/9/2000	Both, fig. 5O	Yes, Z02 fig. 2K-L and H03 fig. 6K-L
<u>33101</u>	<u>12/7/2000</u>	<u>Both, fig. 5L-M</u>	<u>No</u>

33820	6/19/2001	Both, fig. 2B	Yes, H03 fig. 7B
34887	3/8/2002	Both, fig. 2A	Yes, H03 fig. 7H
34891	3/8/2002	Both, fig. 10B	Yes, H03 fig. 8E
<u>34892</u>	<u>3/8/2002</u>	<u>Both, fig. 10C</u>	<u>No</u>
<u>35201</u>	<u>11/16/2001</u>	<u>Both, fig. 10D</u>	<u>No</u>
35206	11/16/2001	Table only	Yes, H03 fig. 7D
35349	Typo, listed in NMMNH catalog as a Bryozoan		
<u>35357</u>	<u>11/30/2001</u>	<u>Both, fig. 7A</u>	<u>No</u>
35436	1/11/2002	Both, fig. 4A-B	Yes, H03 fig. 7G
35459	1/14/2001	Both, fig. 5D	Yes, H03 fig. 7F
35806	3/18/2002	Table only	No
35807	3/18/2002	Both, figs. 2C & 3A	Yes, H03 fig. 7A
35991	3/29/2002	Both, fig. 7B	Yes, H03 fig. 7C
35993	3/29/2002	Both, fig. 8A-B	Yes, H03 fig. 8A
36052	4/15/2002	Both, fig. 5E-F	Yes, H03 fig. 8F
36502	5/29/2002	Table only	No
37300	7/31/2002	Both, fig. 10F	No
37305	7/31/2002	Table only	No

37348	7/31/2002	Table only	No
37349	7/31/2002	Both, fig. 4C-D	Yes, H03 fig. 7E
39184	1/30/2003	Table only	Yes, H03 fig. 8D
39250	1/31/2003	Both, fig. 10E	No
39520	2/1/2003	Table only	Yes, H03 fig. 8C
40395	7/7/2003	Table only	No

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ON MARTZ'S ACCUSATIONS OF PLAGIARISM

In a series of letters written to various New Mexico officials (including the Attorney General, the New Mexico Museum of Natural History and Science Executive Board, the Department of Cultural Affairs and the Office of Governor) and to the Society of Vertebrate Paleontology, Jeffrey Martz, Matthew Wedel and Michael Taylor accuse research staff at the New Mexico Museum of Natural History and Science of plagiarism. The individuals accused are Justin Spielmann, Geoscience Collections Manager and Registrar; Adrian Hunt, former Executive Director; Spencer Lucas, Interim Executive Director; and Andrew Heckert, former Geoscience Collection Manager.

The alleged plagiarism concerns this article: Spielmann, J. A., Hunt, A. P., Lucas, S. G. and Heckert, A. B., 2006, Revision of *Redondasuchus* (Archosauria: Aetosauria) from the Upper Triassic Redonda Formation, New Mexico, with description of a new species: New Mexico Museum of Natural History and Science Bulletin 37, p. 583-587. (Hereafter the article will be referred to as Spielmann et al., 2006).

This article described specimens collected by NMMNH personnel, prepared and repositied at NMMNHS, necessitating a review of the genus *Redondasuchus*. In this review, we did not ignore Martz's (2002) thesis, citing it 14 times in the text and including it in the bibliography.

Note: I have never met Matthew Wedel or Michael Taylor, and it is not clear why they are involved in this matter, as it has nothing to do with their work.

Jeffrey Martz, Matthew Wedel and Michael Taylor's accusations are as follows:

1. That Spielmann et al.'s (2006) paper was not submitted for peer review.
2. That Spielmann et al.'s (2006) paper provides a new review of the genus *Redondasuchus* without properly crediting Martz's (2002) thesis.
3. That Spielmann et al.'s (2006) paper contains a figure (Fig. 1) identical to the one presented by Martz (2002, Fig. 3.1) where he shows the corrected reorientation of an armor fragment of *Redondasuchus*.

RESPONSE

1. Spielmann et al.'s (2006) article was not submitted for peer review

Martz, Wedel and Taylor assert that Spielmann et al.'s (2006) article was not

submitted for peer review. Dr. Jerry Harris, of Dixie State College, St. George, UT, and Dr. Robert Sullivan, of the State Museum of Pennsylvania, Harrisburg, PA, are listed in the acknowledgments as reviewers. Both reviewed the article, and neither detected any impropriety in the article with regard to the way it handled Martz's thesis. Both have published on Late Triassic vertebrates from the southwestern United States, thus demonstrating their expertise. This clearly would meet the criteria of a peer review of most mainstream journals.

Indeed, the review process of NMMNH Bulletin 37 was the one also used by other publications, such as the New Mexico Geological Society, American Museum of Natural History and Indiana University Press. In other words, authors were asked to seek two reviews of their paper, to revise in light of these reviews, and submit the revised manuscript with the review.

2. Spielmann et al.'s (2006) paper provides a new review of the genus *Redondasuchus* without properly crediting Martz's (2002) thesis)

The relevant quote from Martz's (2002) thesis is:

"However, the edges of UCMP V6148 65415 [the type armor plate of *Redondasuchus*] are not well preserved enough to be certain which edge is medial and which is lateral (Fig. 2.3a) [**sic: should read 3.1**]; the reason why Hunt and Lucas (1991) and Heckert et al. (1996) assumed the orientation they did is not clear. However, **if the scute is instead interpreted as a right dorsal paramedian scute**, with the arching being present at the center of ossification, closer to the medial edge (Fig. 2.3.c) [**sic: should read 3.1**] it more strongly resembles the dorsal paramedian scutes of *Typothorax coccinarum* "(Martz, 2004, p. 34-35) [**boldface added by Lucas**].

We did not use Martz's text (words) or illustrations (see below). The long quote from Spielmann et al. and other technical information given below as an appendix makes it clear that there were some inconsistencies in our earlier papers on the orientation of this armor fragment, especially Heckert et al. (1996) where we called the fragment a left but actually described it in such a way that it had to be considered a right.

In 2006, Spielmann independently reached the conclusion that the armor plate was from the right side and easily convinced Hunt, Lucas and Heckert of this. Indeed, Heckert told Spielmann that this had already been evident to him for some years, partly reflected by the text in Heckert et al. (1996). Martz's conclusion regarding this, cited above, was couched in tentative terms and was intended to support his idea that *Redondasuchus* and *Typothorax* are the same kind of aetosaur (same genus).

However, Spielmann et al. neglected to cite Martz's thesis on page 584 with regard to the conclusion that the type armor plate was from the right side of the body, not

the left side. This was an oversight on our part, and this oversight is the basis of the entire accusation of plagiarism.

Unquestionably, it was not our intent to plagiarize or take undue credit for any part of Martz's (2002) thesis. As stated above, we referred to his thesis 14 times in our article and included a complete citation of it in the article bibliography. If our intent were to plagiarize his thesis, why would we have cited it and discussed various aspects of it? Indeed, failing to cite Martz on page 584 of our article was an oversight and nothing more.

3. Spielmann et al.'s (2006) paper contains a figure (Fig. 1) identical to the one presented by Martz (2002, Fig. 3.1) where he shows the corrected reorientation of the armor fragment.

A comparison of Figure 1 of Spielmann et al. (2006) and of Martz Figure 3.1 shows little overall resemblance. Indeed, the lower part of Figure 1 of Spielmann et al. (2006) is based on Figure 5 of Heckert et al. (1996), and this is credited in the caption. Figure 1 of Spielmann et al. (2006) is not in any way based on Martz's Figure 3.1 of his (2002) thesis. (See attached PDF comparing the figures.)

More specifically, the claim is that Spielmann et al. (2006, Fig. 1) appropriated Fig. 3.1b-c of Martz without proper citation. However, Heckert et al. (1996, Fig. 5) oriented all of the armor plates with the medial edge flat on top and the lateral edge angled out to the side. This figure by Heckert et al. (1996), and not Martz (2002), was the influence for Figure 1 of Spielmann et al. (2006) and is properly cited in the figure caption (see attached PDF). Spielmann et al. (2006) did not use any images from Martz (2002), and the inspiration for their Figure 1 came from, and indeed bears a strong resemblance to Heckert et al. (1996, Fig. 5).

SUMMARY

As suggested by Jeffrey Martz, Matthew Wedel and Michael Taylor in their numerous letters to the various New Mexico officials and to the Society of Vertebrate Paleontology, their suspicions of plagiarism are indeed nothing more than an accidental oversight on one specific point to not explicitly cite Martz's (2002) thesis in the matter of the reorientation of the holotype armor plate of the aetosaur *Redondasuchus reseri* and this is the entire basis of their accusation of plagiarism.

There was no intent to plagiarize or actual plagiarism of Martz's (2002) thesis by Spielmann et al.

APPENDIX

Previous inconsistencies and uncertainty about the orientation of the type armor plate of *Redondasuchus*.

In the article Spielmann et al. provided the following discussion of the confusion over the orientation of the holotype armor plate of *Redondasuchus reseri*:

“The confusion is due to the holotype of *Redondasuchus reseri*, and thus of the genus *Redondasuchus*, being identified as a left dorsal paramedian scute. Although both Hunt and Lucas (1991) and Heckert et al. (1996) acknowledge an anterior bar, this is not congruent with the holotype scute being a left dorsal paramedian. In addition, Heckert et al. (1996) mislabeled their figure 5b as a posterior view, even though it is an anterior view of the holotype scute. This confusion is exacerbated by the scute always being figured, in dorsal view, with its anterior margin oriented towards the bottom of the page; this runs counter to typical protocol, which has the anterior margin facing the top of the page in dorsal view. Thus, we revise the orientation of the holotype scute of *R. reseri* and interpret it as a right dorsal paramedian, which makes the point of flexure one-third of the lateral distance along the scute. Although this is a change in the way *Redondasuchus* scutes are interpreted, it does little to fundamentally change the reconstruction of *Redondasuchus* as illustrated by Heckert et al. (1996, fig. 5). In the cross-sections of Heckert et al. (1996, fig. 5), it is clear that all of the dorsal and caudal paramedians are flexed one-third of the way from their medial margin, except for the holotype (Heckert et al., 1996, fig. 5c). This reevaluation of the holotype actually makes the scute flexure more consistent throughout the carapace (Fig. 1).”

Thus, if one examines the descriptions of the material and figures of Heckert et al. (1996) and Heckert and Lucas (2000), it is clear that they understood the correct orientation of the scute prior to Martz (2002), but that their text was inconsistent.

While it is true that Heckert et al. (1996, p. 622) listed the specimen in their discussion as an “almost complete left dorsal paramedian scute,” the description of the specimen does not bear out this description.

Heckert et al. (1996, p. 623) identify an “anterior bar...that is approximately 10 mm wide, flaring out somewhat along the medial edge.” As seen in fig. 3a of Heckert et al. (1996), the only feature that could be interpreted as the anterior bar is located on the bottom of the figure, running contrary to standard figure orientation protocol, and is indeed ~10 mm wide. Thus, it is clear that Heckert et al. (1996) understood which side was anterior, and thus that the scute in question should be a right not a left as they listed.

Further, Heckert et al. (1996, p. 623) note that the ventral keel “lies on the anterior portion of the scute, with the anterior margin of the keel typically positioned approximately 10 mm from the anterior edge of the scute.” Thus, in two places in the text

Heckert et al. (1996) clearly demonstrate that they are able to discern the correct orientation of the scute, though it is never correctly stated.

Heckert and Lucas (2000) follow a similar pattern, with the holotype being listed as a left dorsal paramedian but not being illustrated as such. In fig. 5d-e Heckert and Lucas (2000) correctly identify the dorsal and anterior views of the holotype scute, thus placing the scute in proper orientation.

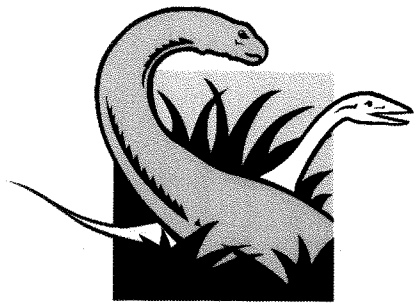
Thus, in two separate publications prior to Martz's (2002) thesis, previous authors were able to correctly orient the holotype scute, but continued to erroneously identify it as a left scute.

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SUGGESTIONS TO IMPROVE THE NMMNHS BULLETIN

1. Diversify the editorial board (add additional non-Museum scientists to editorial board).
2. Insure that an editor does not solely hand review of his/her article(s); another editor must do this.
3. Insist on two reviews by non-Museum staff (two outside reviews) of all articles.
4. In the case of a Bulletin (monograph) authored by Museum staff, an outside editor will handle the reviews.



NEW MEXICO
MUSEUM OF
NATURAL HISTORY
& SCIENCE

REPORT ON REVIEW OF ALLEGATIONS OF IMPROPER PUBLISHING PRACTICES

March 3, 2008

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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

This summary and accompanying documents pertain to allegations of improper publishing practices by Spencer Lucas, Justin Spielman, Andrew Heckert and Adrian Hunt.

The allegations are made by William Parker, a former graduate student at Northern Arizona University and Jeffrey Martz, a graduate student at Texas tech. Additional signatories are added to Martz's correspondence, and they are Michael Taylor and Mathew Wedel. Taylor and Wedel's involvement in the allegations is unclear. The roles of Taylor and Wedel have never been explained in any correspondence to Dr. Lucas, Secretary Ashman or made available to the review panel.

Enclosed in these materials are the original allegations from Martz, Taylor and Wedel with supporting documentation, correspondence between the Department of Cultural Affairs and Martz, Taylor, Wedel and Parker. (Please see table of contents)

Notes from the review conducted by the review panel and letters of support received by the Department of Cultural Affairs.

Review was conducted in the Board of Trustee's Conference Room of the New Mexico Museum of Natural History and Science, 1801 Mountain Road NW, in Albuquerque, New Mexico, on Thursday, February 21, 2008 from 3:00 pm to 5:00 pm MST.

Members of the review panel:

Executive Committee of the New Mexico Museum of Natural History and Science

Board of Trustees:

<u>Gary Friedman</u>	President of the Board of Trustees.
<u>Dr. Peter Gerity</u>	Vice President of the Board of Trustees and Vice President of Academic Affairs of New Mexico Tech.
<u>Dr. Laurence Lattman</u>	Secretary of the Board of Trustees and President Emeritus of New Mexico Tech.

Outside reviewers:

<u>Dr. Norman Silberling</u>	Consulting geologist, former Professor at Stanford University and geologist with U.S. Geological survey
<u>Orin Anderson</u>	New Mexico Bureau of Geology and Mineral resources (ret.)

Staff present:

<u>Stuart Ashman</u>	Cabinet Secretary, Department of Cultural Affairs
<u>Troy Fernandez</u>	Deputy Secretary, Department of Cultural Affairs
<u>Denise Hidalgo</u>	Administrative Assistant

The panel received testimony from Dr. Adrian Hunt, former Director of the Museum and Dr. Spencer Lucas, Interim Director.

Findings/Conclusions:

There were no findings of unethical behavior by Dr. Lucas or any members of the Museum staff. There were clear indications that plagiarism did not occur in either of the instances cited in the allegations. The evidence provided does not sustain the allegations. Further, the declarations made and provided by Dr. Hunt and Dr. Lucas clearly state what actually transpired in both allegations.

William Parker's failure to disclose his ultimate purpose for visiting the collection was raised as the main cause of the problem in that allegation.

No ethical violations were discovered in Jeffrey Martz's allegations.

Recommendations were made to review and revise the Bulletin's peer review process.

Recommendation was made to institute a process for researchers to disclose the purpose of their research when visiting the Museum's collections.

Additional details can be found in the document "Spencer Lucas Review Notes"

**REPORT ON REVIEW OF ALLEGATIONS OF
IMPROPER PUBLISHING PRACTICES AT:**

**NEW MEXICO MUSEUM OF NATURAL
HISTORY AND SCIENCE**

March 3, 2008

REVIEW PANEL NOTES/SUMMARY

SUMMARY OF MEETING
Thursday, February 21, 2008 at 3:00pm - 5:00pm
New Mexico Museum of Natural History & Science
Conference Room – 2nd Floor

Present: Gary Friedman, Esq., President, Board of Trustees, NMMNHS; Dr. Peter Gerity, Vice President, Board of Trustees, NMMNHS Vice President for Academic Affairs, New Mexico Tech; Dr. Larry Lattman, Secretary, Board of Trustees NMMNHS and President Emeritus, New Mexico Tech; Dr. Spencer Lucas, Interim Executive Director, NMMNHS; Secretary Stuart Ashman, Department of Cultural Affairs, State of New Mexico; and, Deputy Secretary Troy Fernandez, Department of Cultural Affairs, State of New Mexico. (Note: Dr. Lucas was not present for duration of the meeting; only present during his direct questioning.)

Present Via Telephone: Dr. Adrian Hunt (former Executive Director, NMMNHS); Mr. Orin Anderson, New Mexico Bureau of Geology and Mineral Resources (Retired); and Dr. Norman Silberling, retired consulting geologist. (Note: Dr. Hunt was not present for the duration of the meeting; only present during the initial telephonic discussions.)

Minutes: Denise Hidalgo, Executive Assistant, NMMNHS (Note: meeting was not recorded.)

Purpose of Meeting: The purpose of this meeting was for the panel to consider allegations made by Jeffrey W. Martz and William G. Parker (specifically); against, Dr. Spencer Lucas, Dr. Adrian Hunt, Dr. Andrew Heckert and Mr. Justin Spielmann (group hereinafter referred to as “Lucas”) alleging that Lucas “stole intellectual property,” “claim-jumped,” and/or “plagiarized” the scientific work of Parker and Martz.

Articles in question: (1) Lucas, S. G., Hunt, A. P., and Spielmann, J.A., 2006, *Rioarribasuchus*, a new name for an aetosaur from the Upper Triassic of north-central New Mexico *in* Harris, J. D., Lucas, S. G., Spielmann, J. A., Lockley, M. G., Milner, A. R. C. and Kirkland, J. I., eds., *The Triassic-Jurassic terrestrial transition: New Mexico Museum of Natural History and Science, Bulletin 37*, p. 581-582; (hereinafter referred to as the Lucas article), and (2) Spielmann, J. A., Hunt, A. P., Lucas, S. G. and Heckert, A. B., 2006, Revision of *Redondasuchus* (Archosauria: Aetosauria) from the Upper Triassic Redonda Formation, New Mexico, with description of a new species; *in* Harris, J. D., Lucas, S. G., Spielmann, J. A., Lockley, M. G., Milner, A. R. C.

and Kirkland, J. I., eds., The Triassic-Jurassic terrestrial transition: New Mexico Museum of Natural History and Science, Bulletin 37, p. 583-587; (hereinafter referred to as the Spielmann article.)

3:12pm MST

Commencement of meeting by Gary Friedman: Friedman started the meeting by stating its purpose and introducing those who were present. The stated reason for this meeting was to openly discuss the allegations made against Lucas, pertaining to and stemming from NMMNHS Bulletin 37.

3:15pm

Discussion with Norman J. Silberling: Silberling submitted a letter dated February 18, 2008, to the panel which stated his analysis of the issues. In response to Chairman Friedman's request, Silberling orally paraphrased the part of his letter dealing with the allegation of plagiarism by Parker. After disclosing his friendly relationship with Lucas and something about his own professional background, Silberling stated that although plagiarism is a very serious charge in academic science, he felt that no plagiarism was involved in the present dispute. He noted that in paleontology, the priority of introducing formal names is especially important. Parker did, in fact, propose a new generic name for the species in question in his master's thesis, but the introduction of a new formal name in a thesis has no validity under the rules governing zoological nomenclature. Subsequently, although Parker argued in abstracts and in a new manuscript reviewed by Lucas that the species in question should be a new genus, he never explicitly wrote that he was, in fact, intending to do that in print. Meanwhile, Lucas and his colleagues in 2006 were unaware that Parker had indeed proposed a new name in a manuscript submitted to a British journal and not published until 2007. Consequently, when Lucas et al. decided that the species in question should be given a new generic name, they independently proposed their own new name in 2006 on the basis of their own long-term study of the fossils in dispute, which are housed in the collections of the New Mexico Museum of Natural History and Science. He noted that Lucas did not venture from sources other than his long-term study of their own data when naming the fossil in dispute.

Silberling noted that Parker and his associates were given full access to the Museum and its collection of specimens of these fossils, which they freely photographed and studied in the Museum building. He said that he believes that Parker's point of contact at the Museum while collecting his data on these fossils was Andy Heckert, who is no longer associated with the Museum. Lucas

has denied receiving any information about Parker's intent to publish a new name, either directly from Parker or through Heckert.

Silberling noted that misconduct could be considered to have occurred on the part of Parker who based his 2007 paper on specimens originally collected and prepared by the Museum and did so without approval to publish on them from the Museum.

Silberling concluded that there was clearly no plagiarism involved in any of the three instances where it has been implied to have occurred.

Norman J. Silberling's letter dated February 18, 2008 to Stuart Ashman and the Executive Committee was adopted into the record.

3:35pm

Discussion with Orin Anderson: Anderson noted that he was proud to be associated with Spencer Lucas. He noted that he has published several articles with Lucas related to stratigraphy and biostratigraphy. Anderson's stated opinion was that Lucas is honest, enthusiastic, thorough; a scientist with a degree of assertiveness which may rankle some scientists.

Anderson believes that resolution to these allegations being considered today should be found within the scientific community, not within administration.

Anderson stated that he did not believe that Lucas plagiarized Parker, because Lucas utilized the Museum's own collection of specimens as the basis to publish a paper. It was clear that the Museum's staff had collected and was actively studying these materials.

Anderson noted that some concessions are being demanded, and the panel should consider reviewing and possibly revising the editorial process of the Museum, notably the method of reviewing articles for publication.

Anderson concluded that the allegation of plagiarism in this instance does not bear any merit, and that perhaps Lucas is more diligent and quicker in his work than most other scientists.

3:50pm

Discussion with Adrian Hunt: Hunt indicated that he welcomed the opportunity to respond to the allegations leveled both at Spencer Lucas and at NMMNHS. He noted that he has known Lucas for over 25 years in a variety of professional and scientific capacities, and that Lucas was his doctoral advisor.

Hunt stated that he would like to provide some broad context before addressing specific issues. Hunt noted that Lucas is one of the leading paleontologists in the world whether judged by quantitative or qualitative means. Quantitatively, the 19th Century paleontologist Edward Cope is widely judged to have been the most published scientist in his field with over 1400 articles. Lucas has already published well over 2000 books, articles and abstracts. Qualitatively, Lucas is equally impressive. China has the largest collection of vertebrate fossils outside the United States, and Lucas is the author of the only comprehensive review of all Chinese fossil vertebrates. In addition, he is the author of the standard textbook on dinosaurs which is used in many colleges and universities across the country and is now in its fifth edition. Hunt concluded that Lucas is one of the most respected paleontologists in the world.

Hunt also indicated that the NMMNHS Bulletin series has a world-wide reputation. While Hunt was the Executive Director for the Museum, he received numerous admiring e-mails from many countries regarding the quality of the Bulletin. In summary, Hunt indicated that both Lucas and the Bulletin series have world-wide reputations, and that these attract intense feelings in others which might explain the apparently disproportionate responses in this case.

Hunt noted that he thought that the specific allegations made against Lucas were without merit.

The first accusation regards the publishing of a new name for an aetosaur (armored reptile). The Museum staff members dug up the fossil remains of an aetosaur from northern New Mexico and subsequently prepared them by removing them from their rock matrix and adding them to the Museum's collection. Lucas was the leader of the research team working on the studies of this fossil. Initially, Lucas and his team published the animal as a new species of an existing genus. However, after further study of other aetosaurs, they realized that the aetosaur represented a distinct genus. Lucas then wrote a paper naming the animal as a new genus.

Independently, Parker decided to use a new generic name for the aetosaur, but he did not inform anyone at the Museum of his intention prior to submitting a paper to a British journal. The Lucas team was completely unaware of this publication or of Parker's intent to publish on objects from the Museum's collection as he never indicated his intention.

It was not until after Parker received information of Lucas' publication that he claimed to have informed Heckert of his intent to name a new genus in the British publication. Heckert denies this. When Parker became aware of Lucas' published article, he called him, and they discussed the situation. During this conversation, Lucas expressed that the Museum team did not know of the Parker publication and Parker seemed to accept this idea. Apparently he has changed his position.

Orin Anderson asked Adrian Hunt a question regarding Mr. Parker's claim that he had presented a paper at a professional meeting, where in his contention that *Rioarribasuchis* rightfully belonged in another genus was introduced and that NMMNHS staff were present at that event. Adrian Hunt responded that he did not think so, he did not recall anyone from the Museum's staff being at that meeting. Additionally, he pointed out that Mr. Parker did not introduce his new name "*Heliocanthus*" at that time.

The other charges concern the Spielmann article. In this article Martz's thesis is cited more than a dozen times and so there was clearly no intent to not give credit to Martz. The disputed section of the paper concerns the orientation of an armor plate. Lucas independently realized that they had initially given the wrong orientation of this plate. Even though Lucas had come to the same conclusion as Martz, the thesis should have been cited in this instance to acknowledge that Martz had also reached this conclusion. Hunt again stated that the multiple citations of the Martz thesis in the Spielmann paper indicate that it was perhaps an oversight to not expound on Martz's contribution. However, given the number of times the thesis was cited, it is clear that this does not constitute plagiarism.

Additionally, the reviewers of the Spielmann paper were also unaware of Parker's paper in the British journal.

There is also a dispute about a figure in the Spielmann paper. It is claimed that this figure is copied from Martz's (2002) thesis whereas it is actually clear that

this figure largely stems from a figure in a 1996 paper by the Lucas team (Heckert et al.).

In answer to a question by Secretary Ashman, Hunt noted that museums are increasingly having researchers sign forms that indicate what they are studying and photographing, and indicating the purpose of this study (e. g., Harvard Museum of Natural History.) Hunt suggested that this would be useful at NMMNHS.

Gerity noted that the Museum should review its policy regarding access to the collection and its procedures related to the publishing of articles in its Bulletin series.

In conclusion, Hunt expressed his opinion that the allegations against Lucas and the Museum have no merit.

4:18pm MST

Adrian Hunt is excused from the meeting

4:20pm MST

Spencer Lucas was called into the conference: He was thanked for his cooperation. It was proposed that the written responses prepared by Lucas would be used as part of the written response to the accusations. (Agreed by Lucas.)

Martz' Accusations of Plagiarism: Regard to article: Lucas, S. G., Hunt, A. P. and Spielmann, J.A., 2006, (Archosauria: Aetosauria) from the Upper Triassic Redonda Formation, New Mexico, Bulletin 37, p. 583-587. Lucas noted that the Spielmann article clearly cited Martz's thesis many times. Lucas cited the Appendix to his written response (attached), which documents that there were inconsistencies in earlier papers on the orientation of this armor plate and the absence of the citing of Martz was an oversight.

Lucas discussed a disputed figure in the Spielmann paper and indicated that it is clearly based on a 1996 figure by Heckert et al., and not on a figure in Martz's (2002) thesis.

In summary, Lucas concluded that there was no intent to plagiarize Martz's thesis in the Spielmann paper.

Parker's Accusations of Claim-Jump: Article in question: Lucas, S. G., Hunt, A. P. and Spielmann, J.A., 2006, *Rioarribasuchus*, a new name for an *aetosaur* from the Upper Triassic of north-central New Mexico: New Mexico Museum of Natural History & Science, Bulletin 37, p. 581-582.

Lucas indicated that the his article was based on fossils collected by NMMNHS personnel and prepared and repositied in the NMMNHS collection; it provided a new scientific generic name for an aetosaur. After the publication of this article in 2006, it was learned that Parker had a paper in process that named the same animal with a different genus name. Parker subsequently alleged that Lucas deliberately acted to beat him to publication by using an internal outlet (NMMNH Bulletin) which did not include a valid review process. Parker used a European scientific journal with a longer turnaround time and his paper was not actually published until three months later. Thus, the two papers (those of Lucas and Parker) were actually published within 4 months of each other. Lucas noted that it is a courtesy to inform fellow researchers when publications are "in process", especially when one is using the scientific research collected by another institution. Parker has stated that someone from the Lucas group was informed of Parker's intention to publish, but this, said Lucas, is not true. In addition, two reviewers of the Lucas paper in the Bulletin also claim that they did not know of Parker's intentions. Lucas indicated that it was an obvious oversight by Parker not to inform his colleagues in Albuquerque about his upcoming publication. The reason for this, said Lucas, is possibly that he had not asked for prior authorization to study the fossils in question. In summation, Lucas stated that the fossils were in the NMMNHS collection, and two different people were researching the same fossil, neither knowing of the other's intent to publish.

Lucas suggested that the Museum needs two external reviews on every paper to be published and that in the future an editor of a Bulletin can not also be a reviewer.

Spencer Lucas's "Suggestions to Improve The NMMNHS Bulletin" has been adopted hereto into the record.

Lucas provided an extensive listing of all scientists who had published in the NMMNHS Bulletin series. In response to a question Lucas indicated that since the publications are produced by a state entity, there is no profit or royalties received by authors.

Lucas noted that his relationship with Parker has always been professional, but

never collaborative.

4:44pm MST - Lucas exits conference room.

4:45pm MST - Panel discusses the allegations, the responses and the comments of Hunt, Silberling, and Anderson.

Findings/conclusions

Panel agrees that it is satisfied with the determination that although the allegations made by Martz and Parker are of a serious nature, the testimony and statements provided by Lucas and Hunt clarify the matter and negate the evidence presented by Parker and Martz.

On the matter of Parker's allegation, his assertion that the staff "knew" of his intent is not definitive. Lucas and Hunt both indicate that they were not told of his intent. Heckert had been asked previously, and he also indicated that he had no knowledge of Parker's intent.

On the matter of Martz's allegation, the repeated mentions of Martz's thesis in the Bulletin clearly indicate that there was no "plagiarism" - neither intended nor committed.

The review panel feels that evidence provided does not sustain the allegation. The declarations provided by Dr. Hunt and by Dr. Lucas, both verbally and in written form, clearly state what actually transpired in the two incidents referred to in the allegations.

However, the panel recommends that this matter be clearly stated in the next Bulletin to clarify for the record any perceived failures in crediting Martz.

The panel agrees that the Museum needs to explicitly re-examine the NMMNHS Publications Policy and establish written documents regarding Review of Articles for the NMMNHS Bulletin Series and Scientific Misconduct actions. This will ensure that there is clarity for staff and outside researchers visiting the collection for publication on the Museum's expectations.

Additionally, a recommendation was made to require that researchers visiting the collections be issued a form to complete and sign disclosing their intended purposes. This procedure would help to clarify a researcher's intent and to further collegiality in research.

Final conversation involved timelines for releasing the findings of the panel and distribution to the Society for Vertebrate Paleontology, the New Mexico Academy of Sciences and any media or constituents that requests same.

END OF SUMMARY/NOTES