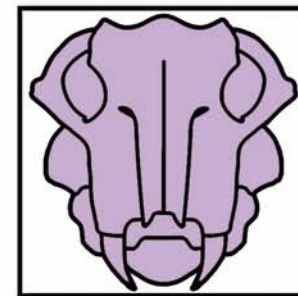


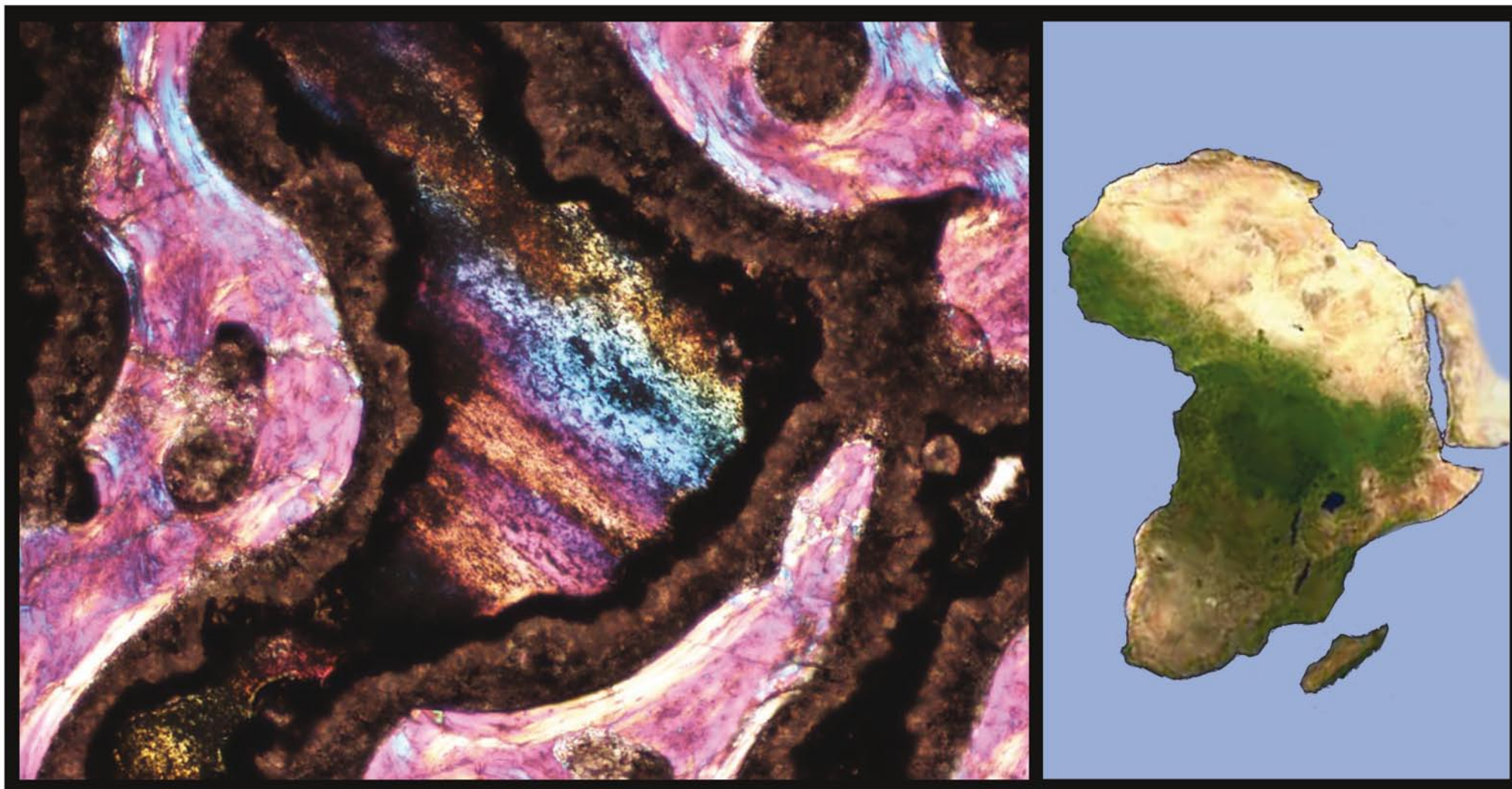
# PALNEWS

BIANNUAL NEWSLETTER OF THE PALAEOONTOLOGICAL SOCIETY OF SOUTHERN AFRICA  
(HALFJAARLIKSE NUUSBRIEF VAN DIE PALEONTOLOGIESE VERENIGING VAN SUIDER AFRIKA)

Vol/Band 18 No. 4



August 2012



From the Editor	<b>3</b>		
News from:			
BPI, Wits, Johannesburg	<b>4</b>	Skin: Its Biology in Black and White	<b>21</b>
Rhodes University, Grahamstown	<b>8</b>	by Nina Jablonski	
From Around the World			
Juan Cisneros	<b>10</b>	Resuscitäre - a photographic exhibition by Brett Eloff	<b>22</b>
Helke Mocke	<b>12</b>		
Tributes to Prof. P.V. Tobias	<b>14</b>	PSSA members and friends - email	<b>23</b>
Notice from SAHRA (E. Cape PHRA)	<b>18</b>	Next Deadline for News	<b>24</b>
Palaeo-spectroscopy: A matrix of similarity indices for Early Pleistocene African hominin crania. by Thackeray, J.F. and Odes, E.J.	<b>19</b>		

PalNews/PalNuus is published by the Palaeontological Society of Southern Africa for its members.  
The views expressed are not necessarily those of the Society or its Officers.

**Editor:** Rose Prevec, (r.prevec@ru.ac.za) (Tel: 079 523 4302 / Fax: 046 - 6037346).  
**Postal address:** Geology Department, Rhodes University, P.O. Box 94, Grahamstown 6140.

**Front cover:** Photograph provided by Sandra Jasinowski - "Africa Within": A thin-section through the skull of *Lystrosaurus* shows the bony struts of the skull encrusted by mineral deposits. By chance, a void within this specimen has a shape that is remarkably similar to the outline of Africa. It seemed appropriate that this 'Rainbow Continent' was embedded within an African dicynodont specimen. Magnification is 100X.



## EDITORIAL

Dear Friends and Members of the PSSA,

Sad news this issue, is the passing of Prof. Phillip Tobias. Although he was not an active member of our society, his work and his reputation impacted greatly on our community and our international presence as South African palaeontologists. Many of us have memories of this eccentric and passionate scientist, and some have stories to share of how he inspired them. Please see page 14 for tributes to one of the great figures in palaeoanthropology.

Enid Cruickshank sent the following to the PSSA membership: '...thank you to everyone who sent me messages after Arthur died. It was a great comfort to the family to see how much he had been appreciated by so many people.' Enid has kindly donated Arthur's collection of PalNews issues to the society, to be lodged in our archives. They should really be scanned in, so that they can be added to the digital archives now available on the PSSA website - any volunteers? By the way, if you haven't yet seen the new webpage, it can be viewed at '<http://www.palaeontologicalsociety.co.za>'. Thanks to webmaster Jen Botha for all her work!

It is not long to go now, until the PSSA congress in Cape Town. Anusuya has asked that you please keep an eye on the website (<http://pssa.cmc-uct.co.za>) for updates. All is on track, and you can find the draft programme online - if you are a participant, please check that you have been allocated a slot. It looks like a fascinating and diverse line-up!

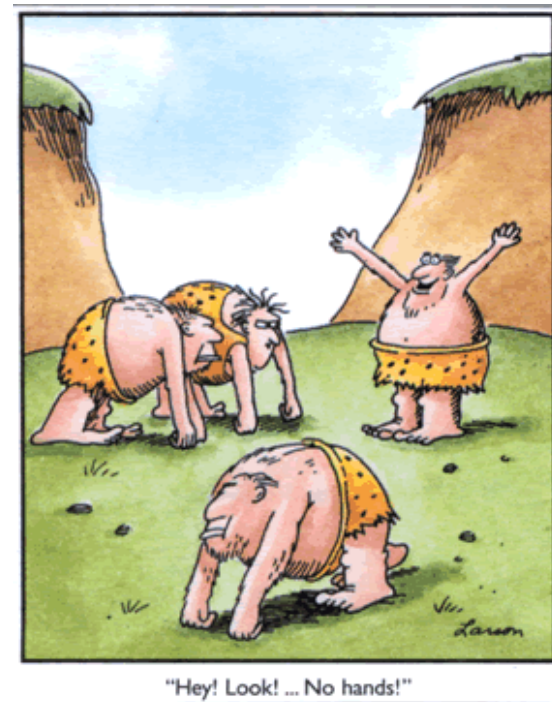
Thanks to Sandra Jasinowski for the cover picture. Sandra submitted her photograph to the SAASTA 2011 South African Science Lens photographic competition, and it was Highly Commended ([http://www.saasta.ac.za/index.php?option=com\\_content&view=article&id=273](http://www.saasta.ac.za/index.php?option=com_content&view=article&id=273)).

Speaking of photography... a visit to Brett Eloff's new exhibition (see page 22) would be worth your while. Although this project has raised some eyebrows, the photographs are a beautiful

intertwining of art and science that frames the observer as the observed. The contrast between the smooth, lithe and living humans, and the dusty angles of the long dead is an intriguing juxtaposition. The parallels with exposure in palaeontology are patent - our job is to see beyond the superficial in our subjects, to strip to the bare bones with preparators tools, scans, x-rays. Integration of the observer, simultaneously vulnerable and empowered without their tools and labcoats, sees these bold palaeontologists embracing their true context in the history of life.

This is my final issue as editor of Palnews. Thank you to those of you who have contributed during my term - it can be a bit of a chore to write in with your news when life is so full of other priorities, but I think the membership appreciates these efforts to keep in touch. It has been a pleasure to be of service to our wonderful society!

Wishing you all the best,  
Rose



## BERNARD PRICE INSTITUTE FOR PALAEONTOLOGY

WITS UNIVERSITY, JOHANNESBURG

As has been our game plan for several years, the BPI and IHE will be merging to form one institute by the beginning of 2013. Effectively this has already happened, but Bruce Rubidge and Francis Thackeray have to spend much time on the bureaucratic side of this development. In the process, a position has been opened for an office manager for the new Institute. **Merrill van der Walt (Nicolas)** has been appointed and will begin in August.

During March **Bruce Rubidge** spent a week in the USA visiting the American Museum of Natural History, SUNY at Stony Brook, the University of Chicago, Field Museum, George Washington University and the Smithsonian to gather information on setting up a graduate programme in Evolutionary Sciences. This was a really worthwhile fact-finding mission, and all the people Bruce met were extremely helpful and went out of their way to assist in providing information.

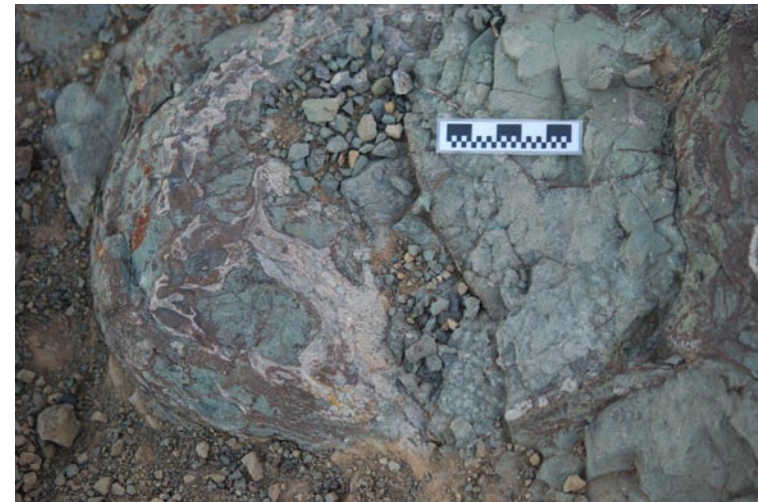
With the move of **Adam Yates** back to Australia, **Jonah Choiniere** has been appointed to undertake research on dinosaurs. He obtained his PhD at George Washington University, and is currently completing a Postdoc at the Field Museum. Jonah brings many exciting skills to the BPI and is not a newcomer to South Africa, as he has collaborated with Billy de Klerk on the dinosaurs of the Kirkwood Formation. He will begin his employment at the BPI in the week immediately after the PSSA Conference and kicks off with teaching a course on vertebrate evolution to Biology students.

**Rob Gess** has joined the BPI as a Postdoctoral Fellow and is continuing his work on Late Devonian vertebrates and ecosystems of the Witteberg Group. Some exciting new finds will be revealed at PSSA so don't miss his presentation. In addition he has been very active doing Palaeontological Impact Assessments in the Eastern Cape. These have a great potential

for Palaeontology graduates, and have resulted in the discovery of important material such as a large therocephalian (with most of its postcranium preserved) from between Middleberg and Noupoot. It is currently being examined, after preliminary preparation at the Albany Museum, by Fernando Abdulla at BPI.



Therapsid burrow at van Wyksfontein after excavation by Rob, Bruce and Vincent.



Therocephalian skull in situ in a farm road between Middleberg and Noupoot.

Earlier in the year Rob accompanied Bruce Rubidge and **Vincent Fernandez** (also a postdoc at the BPI) on a fieldtrip to examine two unusually fine therapsid burrow sites discovered by him, one on his former family farm (van Wyksfontein) near Colesberg and one in the Transkei north of Butterworth. Beautifully preserved casts of therapsid burrows were excavated for the BPI collection. Vincent, who is a specialist in scanning techniques, has been involved in a project to scan vertebrate burrows such as these, in the hopes of being able to elucidate the palaeobiology of therapsids in particular. This project has delivered exciting results.

In February **Bruce Rubidge**, together with **Fernando Abdala**, **Mike Day**, **Sifelani Jirah** and **Charlton Dube** of the BPI, **Billy de Klerk** and **Rose Prevec** from Grahamstown, **Liu Jun** from China and **Juan Cisneros** from Brazil, undertook his usual Tap Zone field trip - this time to the area east of Sutherland to explore the transition between the *Tapinocephalus* and *Pristerognathus* Assemblage Zones. Many fossils were found, some more exciting than others, and are in the process of preparation. This is all leading to a greater understanding of the stratigraphic occurrence of different genera from the Middle Permian. **Mike Day** reports that they found some footprints of a large animal, possibly a pareiasaur, and evidence of dinocephalians occurring in what should be the *Pristerognathus* Zone. In June he went with MSc candidate **Blair McPhee** and Bruce down to Bloemfontein to see some *Eodicynodon* Assemblage Zone specimens. In terms of his PhD research, Mike is currently writing up, having finished data analysis, which involves calculating the stratigraphic ranges of dinocephalians. Within the *Tapinocephalus* Assemblage Zone, the range of individual genera is far more variable than previously thought.

**John Hancox**, **Ken Angielczyk**, and Bruce have completed the long awaited description of the *Shansiodon* and *Angonisaurus* material, which John has through the years collected from the C subzone of the *Cynognathus* Assemblage

Zone. This paper is in press in JVP.

In April this year **Marion Bamford** went to Lake Eyasi in Tanzania with her Spanish colleagues **Rosa Albert** and **Xavier Estèves** to collect phytolith samples as part of the modern vegetation studies for the Olduvai Gorge project. This region is the home of the Hadza people, probably the last living hunter-gather society so we spent a day with them and found out what plant food they consume. **Marion**, **Rose Prevec**, **Billy de Klerk** and **Conrad Labandeira** spent a few days in May at Shamwari Game Reserve near Port Elizabeth collecting fossil charcoal from the Kirkwood Formation. We also looked for dinosaur remains but were unsuccessful. Later Rose and Conrad came up to the BPI to continue working through the fossil plant collections. There was much media interest in the publication by **Lyn Wadley** of Wits University and colleagues in Science in December 2011 on the earliest evidence of the medicinal use of plants. Silicified leaves of *Cryptocarya woodii*, a natural insecticide, were found on top of sedge bedding in Sibudu Cave, KwaZulu-Natal 77 000 years ago. There was even more fuss made about the evidence of the controlled use of fire by humans one million years ago at Wonderwerk Cave in the Northern Cape (Berna *et al.*, 2012). Another recent important publication is the three lines of evidence to show what *Australopithecus sediba* ate: a mainly C3 diet of wood/bark, fruits, seeds, palms and sedges (Henry *et al.*, 2012).

The number of palaeobotany students is growing slowly and two of them should finish their PhDs at the end of the year. **Sandy Lennox** started in January to do a PhD supervised by Marion Bamford and Lyn Wadley on the charcoal from hearths at Sibudu Cave. **Moshood Olayiwola** is in his second year of PhD research on the pollens from a well in the Niger Delta. **Lucy Pereira** continues with the phytoliths from Koobi Fora and will be joined by a post doc later this year. **Joseph Chikumbirike** has made a huge collection of charcoal reference material for his PhD project on the charcoals from Great Zimbabwe.



**Eddie Odes** and **Tanya Hattingh** are also looking at phytoliths as part of their MSc projects (co-supervised by Marion). PhD candidate **Natasha Nicoletti nee Barbolini** (supervised by Marion Bamford and Bruce Rubidge) has been on an extensive palynology sampling campaign throughout the Karoo succession. Most of her samples have been processed and she is now looking over numerous microscope slides to analyse the data. Happily, she has been successful in getting many fruitful samples from all stratigraphic levels in the Karoo, and is getting some very interesting results. **Saniye Guven**, despite the joys and chores of motherhood, is managing to make progress with her thesis on the taxonomy of tapinocephalid dinocephalians. **Sifelani Jirah** has now completed his fieldwork for his stratigraphic project in the *Tapinocephalus* Assemblage Zone north of Prince Albert Road, and is very busy writing up his MSc dissertation. **Cameron Penn-Clarke** recently returned from two weeks of fieldwork for his MSc project on the stratigraphy and sedimentology of the lower Bokkeveld in the Koue Bokkeveld north of Ceres. **Ashley Kruger** has successfully completed his Honours degree in palaeontology and is currently writing up the results of his MSc project on a new biarmosuchid for publication.

**Fernando Abdala** undertook a research trip to Tucuman, Argentina, where he is advancing research on the evolution of the hands of synapsids with **Virginia Abdala**, and on cranial ontogeny of living South American marsupials with **David Flores** and **Norberto Giannini**. He was accompanied by MSc candidate **Blair McPhee**, who went to Tucuman to study the skeleton of the dinosaur *Lessemsaurus*, the closest relative to *Antetonitrus*, a taxon he is describing in his dissertation. Fernando also advanced collaboration on different projects with PhD candidates **Leandro Gaetano** and **Eliana Fernandez**.

Earlier this year **Lucinda Backwell**, together with MSc candidate **Alex Parkinson** and colleague **Eric Roberts** published a paper on the criteria for identifying bone modification by termites in the fossil record. Alex is currently writing up the

results of his entomology experiments, which have produced very interesting results. Lucinda has returned from field work in Botswana just in time to see the release of two articles published in PNAS. These papers describe the earliest evidence of Bushman material culture from Border Cave dated to 44,000 years ago, representing the oldest evidence of modern human behaviour as we know it.



Organic artefacts from Border Cave. a) Wooden digging stick made from *Flueggea virosa* and dated 40,986 - 38,986 cal BP, b) Wooden poison applicator made from *Flueggea virosa* dated to 24,564 - 23,941 cal BP and preserving a residue containing poisonous ricinoleic acid found in castor beans, c) ostrich eggshell beads dated 44,856 - 41,010 cal BP and marine shell beads used as personal ornaments, d) modified warthog or bushpig tusk incised to facilitate hafting, e) bone arrow point decorated with a spiral incision filled with red pigment, f) bone object with four sets of notches, each made by a different tool, and probably used for notational purposes, g) lump of beeswax containing *Euphorbia tirucalli* resin and possibly egg, bound with vegetal twine and dated 41,167 - 39,194 cal BP. Scale bars = 1 cm.

Earlier this year PhD candidate **Aurore Val** published a paper titled "*Small carnivore skinning by professionals. Skeletal effects and implications for the European Palaeolithic*" in the *Journal of Taphonomy*, wrote a paper about Malapa in a French children's journal called *Arkeo*, and published an article in *The Digging Stick* about the BPI postgraduate research trip she organised to France last year. **Brigette Cohen** made good progress with her research on the taphonomic damage caused by small carnivores and simultaneously produced a lot of handmade jewellery. **Mirriam Tawane** graduated with a PhD in Palaeoanthropology in June, and has just taken up a post-doc position with **Lee Berger**, working on material from Malapa.



Mirriam Tawane at her graduation ceremony in June 2012.

**Phillip Taru** submitted his thesis on fossil hairs from hyaena coprolites and recently passed the examination process with minor revision. Congratulations Dr. Tawane and almost-Dr. Taru!

**Brian Kuhn** continues his research into modern and fossil carnivores. The fossil carnivores from Malapa were recently published in PLoS ONE in a paper titled "*Carnivoran remains from the Malapa hominin site, South Africa.*" The book "*Hyaenids: Taphonomy and Implications for the Palaeoenvironment*" came out late last year after five years in the making. Brian continues to cross disciplinary lines between palaeontological techniques and ecological issues in the modern world, as demonstrated in his paper in the *International Journal of Ecology* on bone accumulations of spotted hyaenas as indicators of diet and human conflict in Botswana.

- Berna, F., Goldberg, P., Horwitz, L.K., Brink, J., Holt, S., Bamford, M., Chazan, M. 2012. Microstratigraphic evidence for in situ fire in the Acheulean strata of Wonderwerk Cave, Northern Cape Province, South Africa. PNAS. Doi/10.1073/pnas.1117620109
- Henry, A.G., Ungar, P.S., Passey, B.H., Sponheimer, M., Rossouw, L., Bamford, M., Sandberg, P., de Ruiter, D.J., Berger, L. 2012. The diet of Australopithecus sediba. Nature. doi:10.1038/nature11185
- Wadley, L., Sievers, C., Bamford, M., Miller, C., Goldberg, P., Berna, F., 2011. Middle Stone Age bedding construction and settlement patterns at Sibudu, South Africa. Science 334, 1388-1391.

Members of the BPI have been making headlines lately. See the following links - ed.

<http://www.businessday.co.za/Articles/Content.aspx?id=176718>

<http://www.businessday.co.za/articles/Content.aspx?id=176715>

## RHODES UNIVERSITY, GRAHAMSTOWN

An exciting development for our palaeocommunity here in Grahamstown, and indeed for the whole of South Africa, was the arrival of **Annette Götz** at Rhodes University. Annette has taken over from **Emese Bordy** (now at UCT) as sedimentologist in the Geology Department, and the great news is that she is a palynologist with an interest in biostratigraphy and palaeoclimate. These are rare skills indeed in South Africa and will provide a very welcome injection into these long-neglected areas of research. Annette had the following to say in the June issue of the AASP (American Association of Stratigraphic Palynologists, Inc.) newsletter:

### South Africa's palynological challenges - a bright future

Our knowledge of Pre-Quaternary palynology, especially the Permian-Triassic palynology of South Africa's Karoo Basin is based on fundamental works carried out in the 70s and 80s of the last century by Anderson (1977) and Falcon (see 1989 and references therein). So far, all correlation schemes of Permian-Triassic sedimentary series in the Karoo and the detailed coal seam detection and characterization in these basins are based on these data. Integrated palynological-sedimentological investigations, applying the detailed study of palynofacies to basin analysis, have not been addressed in the past, since e.g. coal seam correlation on a high time resolution was beyond the scope of the coal mining industry, who have relied mainly on stratigraphic data for their exploration activities with respect to economic mining.

Integrated palynological-palaeobotanical studies have also not yet been carried out, although there are unique plant fossils known from the Karoo basin with a long history of scientific work reflected in numerous excellent publications (e.g. Plumstead, 1969; Anderson & Anderson, 1985; Kovács-Endrödy, 1991; Bordy & Prevec, 2008). On the other hand, there is huge potential for



# HYAENIDS

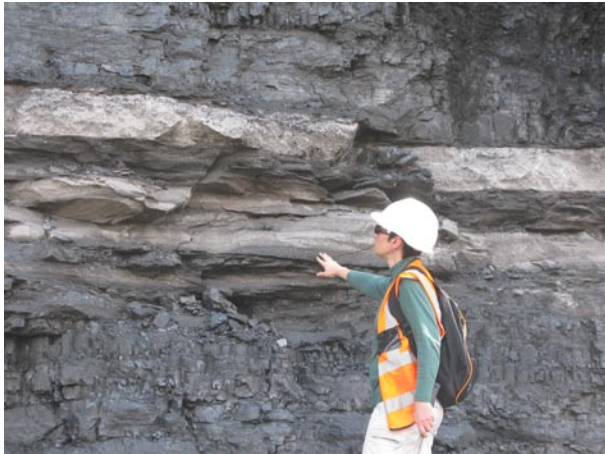
Taphonomy and Implications  
for the Palaeoenvironment

By **BRIAN KUHN**



collaboration with scientists from other parts of Gondwana, particularly South America (Brazil) and Australia, where the sciences of palynology and palaeobotany are further developed. This is important for inter-continental, intra-Gondwanic correlations, which have a direct impact on our understanding of global extinction phases, climate change, plate tectonics etc., and particularly in understanding the palaeodistributions of organisms in time and space.

From this background, it seems a must to develop new integrated concepts facing stratigraphical, palaeobiogeographical, palaeoecological, palaeoenvironmental, and palaeoclimatic questions. Palynology is thus seen to be a crucial discipline to contribute to the establishment of such new concepts for the Karoo and its Permian-Triassic depositional history. Future challenges are manifold and the Karoo subbasins are a perfect play area – well, a bright future for palynologists!



The No. 2 coal seam of the northern Witbank Basin, South Africa. Postglacial fluvio-deltaic deposits of the Permian *Ecca* Group record a major floral change succeeding the Permo-Carboniferous Gondwana glaciation. The palynomorph assemblages indicate a cold climate, fern wetland community, characteristic of lowland alluvial plains, and an upland conifer community in the lower part of the coal seam. Up section, these communities are replaced by a cool-temperate cycad-like lowland vegetation and gymnospermous upland flora (Götz & Ruckwied, 2012).

## References

- Anderson, J.M. 1977. The biostratigraphy of the Permian and Triassic. Part 3. A review of Gondwana palynology with particular reference to the northern Karoo Basin, South Africa. *Memoirs of the Botanical Survey of South Africa* 41, 1-133.
- Anderson, J.M. and Anderson, H.M. 1985. Palaeoflora of southern Africa. Prodomus of southern African megafloras Devonian to Lower Cretaceous. A.A. Balkema, Rotterdam, The Netherlands, 423 pp.
- Bordy, E.M. and Prevec, R. 2008. Sedimentology, palaeontology and palaeoenvironments of the Middle (?) to Upper Permian Emakwezini Formation (Karoo Supergroup, South Africa). *South African Journal of Geology* 111(4), 429-458.
- Falcon, R.M.S. 1989. Macro and microfactors affecting coal-seam quality and distribution in southern Africa with particular reference to the No. 2 seam, Witbank Coalfield, South Africa. *International Journal of Coal Geology* 12, 681-731.
- Götz, A.E. and Ruckwied, K. 2012. Archives of palaeoenvironmental and climate change: the palynological record of coal deposits. Abstracts of the 34th International Geological Congress. August 5-10, 2012, Brisbane, Australia.
- Kovács-Endrödy, É. 1991. On the Late Permian age of *Ecca* *Glossopteris* floras in the Transvaal Province with a key to and description of twenty five *Glossopteris* species. *Memoir* 77, 111 p. Geological Survey of South Africa.
- Plumstead, E.P. 1969. Three thousand million years of plant life in Africa. Alex L. Du Toit Memorial Lectures 11. *Geological Society of South Africa*. 72 pp.

## UPCOMING BIOSTRATIGRAPHY WORKSHOP AT RHODES

Annette E. Götz, in collaboration with Shell, is offering a one week workshop in Applied Biostratigraphy on the 12-16 November 2012, in the Geology Department at Rhodes University. The course content will be presented at entrance level and is aimed at postgraduate students, academics new to the field, and industry geologists. The workshop will focus on palynomorphs from South African Mesozoic sedimentary basins with a strong bias to applications relevant to industry needs. Presenters are **Dr Katrin Ruckwied** and **Dr Iain M. Prince** (Shell), and Prof **Annette E. Götz** (Rhodes University). Further information on content and registration can be found in the Workshop Flyer (to follow) or can be requested from the course organiser (a.gotz@ru.ac.za).



**RHODES UNIVERSITY**  
*Where leaders learn*



The Geology Department at Rhodes University hosts the

### 2012 Shell Lecture Series Workshop

## Applied Biostratigraphy in Exploration and Production

November 12<sup>th</sup> – 16<sup>th</sup> 2012

Rhodes University, Grahamstown, South Africa

*This Workshop is free for students and academics*

The workshop covers all aspects of industrial biostratigraphy on an awareness level. The focus will be on palynomorphs as this is the fossil group applicable to the Karoo Basin (coal and hydrocarbons) as well as in the Cretaceous sediments offshore South Africa. The workshop will be composed of lectures, microscopic examinations and exercises. Participants will get an overview of biostratigraphy and how it can be applied in the industry, which fossils to use in which stratigraphic interval and lithology, how to interpret age and palaeoenvironment of sediments based on the fossil content and how to avoid/recognize pit falls.

Audience: PhD and MSc students, researchers, as well as industry employees that are working in exploration and production (coal, hydrocarbons).

### Lecturers



**Dr. Katrin D. Ruckwied** works as Biostratigrapher for Shell. Before she joined Shell in Houston she worked 4 years in the Netherlands in the Shell Centre of Expertise. Her background is palynology of Palaeozoic and Mesozoic sediments. Besides other projects Katrin is specialized in the biostratigraphy of the Karoo Basin.



**Dr. Iain M. Prince** is Principal Technical Expert for Biostratigraphy in Shell. Before joining Shell he was Biostratigraphy Advisor in Statoil and has worked in NW Europe, West Africa, South America, Gulf of Mexico and onshore USA. Iain's background is palynology of Cenozoic and Mesozoic sediments.



**Prof. Annette E. Götz** works on sedimentary basins world wide, applying palynofacies analysis to high-resolution cyclo- and sequence stratigraphy. From 2012 she joined Rhodes University as the Geology Department's sedimentologist. Her recent research focusses on coal deposits as palaeoclimate archives.

Contact, further information and registration: Prof. Annette E. Götz, Rhodes University, Email: [a.gotz@ru.ac.za](mailto:a.gotz@ru.ac.za)



## NEWS FROM AROUND THE WORLD

### Juan Cisneros - Uni. Federal do Piauí (Brazil)

Things in Teresina, Piauí, are hot (and it will always be like that, since we are located almost at the equator). In April we assembled a team with **Ken Angielczyk** from the Field Museum, and friends from other institutions, to do a second campaign through the Parnaíba Basin, in the states of Piauí and Maranhão, targeting the Permian Pedra de Fogo Formation. The first fieldwork was done in February 2011, when we selected the localities for working this year. The last fieldwork was very interesting, and yielded many surprises. The big stars were some new temnospondyle species, but also nice chondrichthyans, coelacanths and lungfishes made their appearance. At night the team fairly commemorated the big discoveries with equally big caipirinhas. A documentary produced by the Field Museum will show the most exciting moments of the field trip (hopefully it doesn't show us drinking too much). Our work will serve as a basis to better understand Permian continental vertebrates in equatorial regions of Pangaea.



A tooth of the shark-like chimaeroid *Anisopleurodontis pricei*, the terror of the Brazilian Permian sea.





The team assembled in front of the Boa Esperança Lake, Maranhão. In the background: Martha Richter, Ken Angielczyk, Chris Kammerer, Jörg Fröbisch and Jeffrey Johnson, Mayana Castro; in the front: Roger Smith, Claudia Marsicano, Juan Cisneros and Dominga da Conceição.



The city of Teresina and the Poti River. The fossil forest is located only 2km from the bridge where this picture was taken.

Over the last months I have been involved in a work for the local authorities of Teresina in order to provide guidelines for the protection, and development as a park, of the petrified forest located in the Poti River. The city of Teresina is divided in east and west by the Poti River (a tributary of the Parnaíba River that gives the name to the basin). On the shores of the river, in the city centre (yes, in the centre!) a fossil forest of Permian age (Pedra de Fogo Formation) crop outs. This forest can only be seen in the dry season. As far as I now, Teresina is the only city that has its own petrified forest (if someone knows of another city in the world that has a fossil forest within the urban area please send me an email, I am curious to know about it). This forest is also notable because many of the trunks are in growing position.

Recent publications:

Los Fósiles del Tomayate: Una Ventana al Cuaternario de Centroamérica. 96pp. Book (in Spanish) available through Amazon.



Biologist Adão Souza showing a trunk in life position at the fossil forest; Juan posing with a fossil trunk on the shores of the Poti River.



## HELKE MOCKE - Geological Survey of Namibia

### Sperrgebiet Fieldtrip 10-23 May 2012 with the French Namibian Palaeontology Expedition

During the 10-23 May field season, it was once again time to visit the forbidding beauty of the Sperrgebiet in south-western Namibia, with the French Namibian Palaeontology Expedition consisting of French palaeontologists Dr **Martin Pickford** and Dr **Brigitte Senut** from the Muséum national d'Histoire naturelle in Paris, France and palaeontologist and curator Mrs **Helke Mocke** from the National Earth Science Museum at the Geological Survey of Namibia.

This place never fails to amaze, not only with its desolate beauty but also in yielding spectacular finds with every trip. At this stage it is always tricky to reveal exactly what has been found, as you know that the fossils first have to be researched and published, but make sure to watch this space.



The Buntfeldschuh locality



Brigitte and Martin excavating a *Namibchersus* juvenile tortoise at Elisabethfeld.

Drs Pickford and Senut are only to be admired at how easily they seem to "sniff" out some of these fossils, and every person seems to have an area that represents their personal Mecca. The sites that were visited included Buntfeldschuh, Grillental GT6, Grillental GT1, Langental, Elisabethfeld, Black Crow, Eisenkieselklippenbaken, Fiskus, Silica North and two new sites. Here follow some of the highlights of this field season.

Brigitte found a complete ruminant pelvis, sacrum and three lumbar vertebrae at Elisabethfeld, while we had been roaming the same area on numerous occasions without finding anything. A complete *Namibchersus* juvenile tortoise was excavated by the team at the same site. This remains backbreaking work. A beautiful petrified tree trunk was sampled. The fossil tree's cellular structure was clearly visible, as well as preserved insect borings. Several *Isurus* shark teeth were collected at the Buntfeldschuh Eocene Site. At the Langental Eocene Shark Site more than 120 shark teeth were collected mostly by scanning



the sediment and gravel surface on hands and knees. It is clear that the teeth represent a variety of at least 4 different shark species, including *Isurus*. At the Eisenkieselklippenbaken Eocene site, also known as EKKB Eocene, beautiful specimens of both planorbid and hydrobid freshwater snails, as well as fossilised algal remains were collected. Many of the hydrobid snails are preserved on silica "pedestals" and are smaller than 1 cm. Martin could not resist going to this site several times.



Shark tooth from the Langental Eocene Shark Site.

During most of the trip we were blessed with fantastic weather. It was only during the last 2 or 3 days that it became extremely windy, so much so, that Brigitte's glasses became sandblasted. This field season yielded more than 400 fossil specimens. Drs Pickford and Senut also gave a talk to NamDeb employees in Oranjemund. Silica blocks from the Silica North and South sites, containing fossil freshwater snails were retrieved and brought to the museum. These were collected on a previous expedition and needed to be scanned first for diamond security purposes.

## PAST's Walking Tall

Doing our 67 minutes everyday



The Walking Tall School Project's cast met with Tata Madiba yesterday after performing its origin sciences educational show for learners at the Zwelodumo and Milton Mbekela schools in Qunu, Eastern Cape.

## Happy 94<sup>th</sup> Madiba!



## TRIBUTES TO PROF. PHILLIP V. TOBIAS



PVT at the the launch of Scatterlings, with Derek Hanekom (Dep. Minister DST) on his right, Andrea Leenen (PAST), Rick Menell (PAST Chair) and Jay Naidoo (PAST Patron).

## PAST

PAST was shocked and saddened to learn of the death on 7 June 2012 of world-renowned scientist and palaeontologist Phillip Tobias after a long illness. PVT, as he was affectionately known, was instrumental in the formation of PAST in 1994 at a time when the iconic prehistoric Sterkfontein fossil site was in danger of closing through lack of funding. Through his and Wits University's efforts and those of influential businessmen, the PAST Trust was formed, funds were raised and Sterkfontein was saved to yield its many treasures. Over time PAST grew in stature as a champion of the origin sciences with PVT as its greatest ally and its Chief Scientific Advisor, a position which he held for many years.

PVT was an enthusiastic supporter of PAST's Scatterlings of Africa initiative and in May 2011 was invited to become PAST's Scientific Patron, an honour he was delighted to accept and a role in which he revelled as is reflected in his words below.

"Scatterlings of Africa is the newest, bold and visionary undertaking of PAST and it signifies the expansion of the PAST mission across Africa. The research of the past 100 years has shown us that any quest for the origin and early evolution of humankind must be pan-African in context and scope. The plan to spread the message of PAST to every corner of Africa enjoys my enthusiastic support."

*Prof. Emer. Phillip V. Tobias FRS Chief Scientific Patron*

## Francis Thackeray

It is with great sadness that we heard that Professor Phillip Valentine Tobias had died on June 7th this year.

Professor Tobias was an outstanding palaeo-anthropologist, a scientist who made major contributions to the study of human evolution. Like Robert Broom, Tobias was elected as a fellow of



the Royal Society. He was elected President of the South African Archaeological Society in 1964, the very year in which he described *Homo habilis*, together with Louis Leakey and John Napier.

It was Professor Tobias who, in meticulous detail, described the skull of a new species which he called *Australopithecus boisei*, discovered by Dr Mary Leakey at Olduvai Gorge in Tanzania.

Since 1966, he directed excavations at Sterkfontein for more than 40 years, within which time about 600 fossils were discovered, many of them just fragments of skulls.

On the 23rd May, 1979, the Rand Daily Mail reported on an exciting discovery of a fragmentary set of fossils from Sterkfontein, representing one individual. The report read as follows, "The gift that Professor Phillip Tobias would like to receive most is another beautiful fossil skeleton from Sterkfontein". Sixteen years later, Professor Ron Clarke discovered the first part of the Little Foot skeleton. We can say, in retrospect, that Phillip Tobias was indeed granted what he most wanted in life: "a beautiful fossil skeleton", virtually complete, one that was discovered through the efforts of Ron Clarke, Nkwane Molefe, Stephen Mostumi, and the dedicated crew at Sterkfontein.

Science is usually undertaken dispassionately, but it has been said that "Scientists have feelings too". This certainly applied to Phillip Tobias who recently shed a tear of excitement on seeing the remarkable skeletons of *Australopithecus sediba*, discovered by Professor Lee Berger.

South Africa is proud not only of our rich palaeontological heritage, but also of the eternal legacy of Professor Tobias, the South African doyen of palaeoanthropology, and a champion of human rights. Tobias was nominated three times for the Nobel Prize.

We express our sincere condolences to the family, friends and colleagues of Professor Tobias. We have lost a great and special representative of our species, *Homo sapiens*. May he rest in peace.



Professor Phillip Tobias on his last visit to Sterkfontein.  
Photograph by Francis Thackeray

### Basil Cooke

I was very sad to learn of the passing of Phillip Tobias whom I have known as a student, colleague, and friend for more than 60 years. After the Second World War, I was teaching Geology at Wits and had introduced a short course on Vertebrate Evolution. Professor Raymond Dart thought that this would be useful to the students in his medical science programme. Phillip was one of those students, and soon appreciated the value of a geological time frame. Phillip organized an excursion to Makapansgat and found hominid remains in the dumps of material excavated by quarrymen who had sought high-grade limestone for burning in kilns as a source of fertilizer. Thereafter, Phillip was "hooked" by hominid evolution and soon became an eminent figure in the analysis of early hominid remains.

He received many awards for his work, including the rare honour of becoming a Fellow of the Royal Society of London. He also stimulated many students to undertake research on fossil hominids and thus became a leader in the field of hominid evolution.

His passing is a great loss to science.

## **Christine Steininger**

Here is a memory I have of Prof. Tobias:

Prof. Tobias was a gentleman with a great spirit for life. When I first came to South Africa, I didn't know very many people and I think he saw I was lonely being so far away from home. He asked if I would be interested in attending an Italian film festival with him that the Italian Embassy was put on. I was so touched that he was concerned about my welfare. Needless to say I had a great time, but what left an impression was that he knew so many people by name. All of them stood taller with wide smiles across their face as he said their name. I asked him later about it and he said that he had lectured many of them. These men and women were at least 50+ and he remembered them during their years at Wits! Wow! I recently saw clips of him lecturing and hope that I will meet those high standards with my students.

## **Kimberley Houghton**

I do not have much to say about Prof. Tobias because I'm still a student and new in the field, yet I can't believe that I got to meet him in my life-time. Here is a man I read about in text books for years and actually studied at the same institute where he was employed. I got the opportunity to give a presentation at a conference in honour of Prof. Tobias last year and having him comment on it was probably the highlight of not just my career but my life so far.

## **Rose Prevec**

The first time I saw Prof Tobias, I was entranced. It was at the schools Art's Festival up at the Monument here in Grahamstown, and he gave a fascinating talk on human origins. I thought he was just wonderful, and I was one of the respectful throng of schoolkids hanging back after the talk to hear more and ask

questions. I remembered thinking what a gentleman he was, amazed at how he could mesmerise his audience. Engaging with the public and with his students was clearly one of his many great gifts. That was also my first visit to Grahamstown, which has now been my home for 8 years.

## **Susie Jordan Partridge**

Phillip Tobias was a great influence in the academic life of my husband Professor Tim Partridge. He imparted great knowledge to Tim during his years when Tim studied and worked with him on the Cradle of Human Kind research and other projects internationally. The world has lost a great man but he has now joined the likes of Darwin and others who were a great force in recognising and researching human evolution along with my husband Tim, I am sure they are a happy band of pilgrims, who have now solved the mystery of their research.



**Bernhard Zipfel** shares his most embarrassing moment in a dedication to Professor Phillip Valentine Tobias.

Having only recently entered the Palaeosciences as a full-time career in 2007, Prof. Phillip Tobias was extremely kind and helpful to me; always encouraging me in my position as new University Curator of Collections, in what was potentially a very daunting job. With his recent passing, I have reflected on a few memories, and share here one in particular.

In 2008, Wits University embarked on a collaborative project with the Northwest Provincial government to promote the Taung skull to the Taung community during the Heritage Day celebrations in that region. I was asked to coordinate this effort. As this was the first time that this event was taking place, I suggested that Professor Tobias join me in Taung where he would address high level dignitaries, including the Premier of the North West Province. He graciously accepted, and requested that I bring with me a slide projector for him to use, as his presentation was still in the form of 'old fashioned' slides.

I have not used one of these devices in many years. Still being 'new', I was determined to ensure that the Professor's slide show should go flawlessly in the presence of such an important audience. I eventually found the Departmental (long unused and dusty) projector and managed to find a second backup projector in case the first one failed. I was convinced that there was no way that anything could go wrong.

On the evening of the gala function, smartly dressed dignitaries with appropriate security arrived at the hotel in Taung, and Prof. Tobias prepared to meet them, and present a lecture on the Taung Child and its importance to the World. Of the technical staff at the hotel, no-one could be found who knew how to operate the slide projector. Minutes before Prof. Tobias was due to step up to the podium, he unexpectedly instructed me to operate the antiquated device. I quickly set up the equipment and loaded the carousel, switching on the machine to check that it worked. It did!! To make absolutely sure, I checked the second

projector and strategically placed it within reach. I was prepared and nothing could go wrong!!!! So I thought....

After the Premier arrived and initial welcome speeches were made, the good Professor stepped up to the podium and addressed the hushed crowd of VIPs. After about 10 minutes of introduction, he nodded to me and said in a loud voice 'first slide please, Bernhard'. I switched on the projector that had worked just a moment before, and the globe promptly burned out. I calmly removed it and replaced it with the spare. This one also instantly popped when switched on. I then somewhat nervously removed the slide carousel and brought out the second projector onto which I fitted the carousel. Thank goodness for the backup projector, I thought. You have no idea how time stands still under these circumstances with a perfectly quiet crowd waiting in anticipation. I then took a deep breath, and switched on the backup projector. The globe worked and I was elated! However, as I forwarded the carousel to the first slide, I heard the sickening sound of a (very old) slide being chewed up by the projector. When I attempted to forward to the next slide, the whole thing completely jammed up. I couldn't remove the carousel or slides! Prof. Tobias looked at me, and with a hint of irritation in his voice asked if I could please get the first slide up. I just shook my head and said in a slightly quivery voice, that it wasn't going to happen. I looked around for help or support, and I'm sure I saw people shuffling away from me and averting their eyes from my panic-stricken countenance. The Professor then said, 'never mind, let's move on'. He then removed the microphone from the stand, stepped out from behind the podium and proceeded to speak while walking up and down, making eye contact with the audience. It was a truly dynamic and wonderful presentation which had everyone hanging on every word! All I could think about was whether I could go back to Health Sciences after being fired. I have never been so embarrassed. Every now and then, Prof. Tobias would pause and say something like 'now if you can imagine slide number 27, you would see....'. He ended his presentation with a standing ovation.



After things had quietened down a little, I walked, or rather, grovelled up to him and started apologising. He cut me short saying "Oh nonsense, that could happen to anyone, I thought the talk went rather well without slides.....I think I'll do that in future. Please join me for a drink". I felt very relieved, and realised that this wise old man had placed himself in my position, and treated me accordingly. I will always remember that. He phoned me at home a few days later and thanked me once again for the opportunity. Rest in peace PVT!!!



## **SOUTH AFRICAN HERITAGE RESOURCES AGENCY**

111 HARRINGTON STREET, CAPE TOWN, 8001  
PO BOX 4637, CAPE TOWN, 8000  
TEL: (021) 462 4502 FAX: (021) 462 4509

### **NOTICE TO STAKEHOLDERS**

Dear Stakeholder,

#### **SAHRA HANDOVER OF S35, S36 & S38 FUNCTIONS IN TERMS OF THE NATIONAL HERITAGE RESOURCES ACT, NO. 25 OF 1999, TO THE EASTERN CAPE PROVINCIAL HERITAGE RESOURCES AUTHORITY**

Responsibilities for the management of archaeological and paleontological resources, and meteorites, as well as burial grounds and graves within the Eastern Cape Province have been handed over to the Eastern Cape Provincial Heritage Resources Authority (ECPHRA).

The ECPHRA will commence with these functions as of **1 August 2012**.

Please note permit applications that have been received by SAHRA prior to this date will be finalized by SAHRA. All applications received from the above date onwards will be managed by the ECPHRA.

Please see contact details of the respective authorities below should you require clarity on the above.

Eastern Cape Provincial Heritage Resources Authority  
Mr Sello Mokhanya  
74 Alexander Road  
King Williams Town  
5600  
Tel:  
Email: [smokhanya@ecphra.org.za](mailto:smokhanya@ecphra.org.za)

South African Heritage Resources Agency  
Mrs Colette Scheermeyer  
P.O. Box 4637  
Cape Town  
8000  
Tel: 021 462 4502  
Email: [cscheermeyer@sahra.org.za](mailto:cscheermeyer@sahra.org.za)

# Palaeo-spectroscopy: A matrix of similarity indices for Early Pleistocene African hominin crania

by Thackeray, J.F. and Odes, E.J.

Institute for Human Evolution, University of the Witwatersrand, PO WITS,  
Johannesburg 2050, South Africa  
Email address for correspondence: Francis.thackeray@wits.ac.za

Recognizing a lack of consensus regarding the taxonomy and phylogeny of Early Pleistocene hominin fossils from Africa, dated between 1.5 and 2.0 million years ago (Mya), we present a matrix of similarity indices based on pair-wise comparisons of crania. The approach is based on a statistical (probabilistic) definition of a species<sup>1</sup>, using least-squares linear regression analysis of cranial dimensions<sup>2-5</sup>. High degrees of similarity are obtained between specimens attributed to *Australopithecus africanus* (Sts 5) and *Homo habilis* (KNM ER 1813), and between the latter and specimens attributed to *Homo ergaster* (KNM ER 3733 and KNM ER 3883). The cranium of a newly described species, *A. sediba* from Malapa (MH1), with a mosaic of characters including features of *Homo*, appears to be most similar to specimens attributed to early *Homo* (KNM ER 3733 and KNM ER 3883), and to a lesser extent to specimens attributed to *H. rudolfensis* (KJM ER 1470) and *H. habilis* (KNM ER 1813) although it has been placed in the genus *Australopithecus*<sup>6-10</sup>. We conclude that there is a spectrum of variability in cranial morphology, changing through evolutionary time and geographical space on the African continent in the Plio-Pleistocene. The approach contributes to an ability to recognize chronospecies without relying on the Linnaean (binomial) system of nomenclature.

Measurements of crania are used for purposes of least squares linear regression analysis in pair-wise comparisons. A low degree of scatter around a regression line, associated with the general equation  $y = mx + c$ , reflects a high degree of morphological similarity between pairs of specimens. The degree of scatter can

be quantified in terms of the standard error of the  $m$  coefficient (sem). Log-transformed sem statistics for pairwise comparisons of modern taxa show a normal distribution, displaying central tendency around a mean log sem value of  $-1.61 \pm 0.23$  (ref 1).

This can be used as a statistical (probabilistic) definition of a species, based on extant taxa (mammals, birds, reptiles and invertebrates). The same technique has been applied to extinct hominin specimens attributed to *Australopithecus africanus*, *A. sediba*, *Homo habilis*, *H. rudolfensis*, *H. erectus* or *H. ergaster*.

Fig. 1 presents a matrix of log sem values obtained from pairwise comparisons. The results are colour-coded in a spectrum such that red reflects a high degree of similarity, whereas violet reflects a low degree of similarity between specimens.

The highest degrees of similarity are obtained for comparisons between KNM-ER 1813 and KNM-ER 3733, despite the fact these specimens have been attributed to *H. habilis* and *H. ergaster*, respectively. Thackeray has previously suggested that these contemporaneous specimens, both dated about 1.6 million years, are female and male specimens of one species.

*Australopithecus sediba* has recently been described as a new hominin species with *Homo*-like characters<sup>6</sup>, dated circa 1.98 Mya<sup>11,12</sup>. In terms of log sem statistics, MH1 (the type specimen of *A. sediba*) is most similar to KNM-ER 3733 (Fig. 1). To a lesser extent it is similar to specimens attributed to *H. rudolfensis* (KJM ER 1470) and *H. habilis* (KNM ER 1813), which have also been placed in the genus *Australopithecus*<sup>13</sup>.

Taken together, the data in the matrix presented in Fig. 1 can be regarded as a first attempt to address the concept of a chronospecies using log sem values. We refer to this approach as palaeo-spectroscopy, and appeal for its application to address the problem of morphological changes through evolutionary time, associated with a chronospecies.

This research has been supported by the National Research Foundation, the Andrew W. Mellon Foundation and the French Embassy in South Africa.



Fig. 1

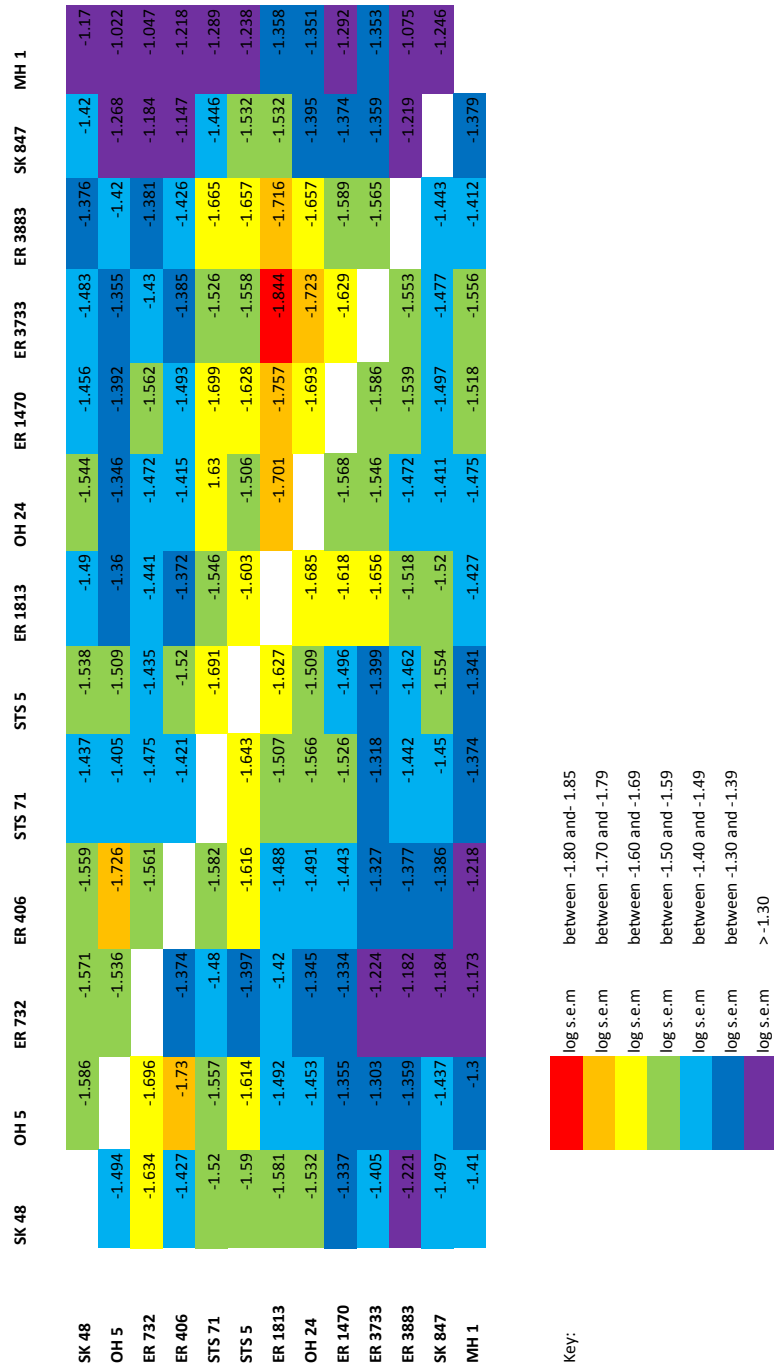


Figure 1. A matrix of log sem values for pair-wise comparisons of Early Pleistocene African hominins, based on least squares linear regression analysis of cranial dimensions.

Table 1. A list of Early Pleistocene hominin cranial fossils included in this study.

Specimen #	Taxon	Provenance
OH 24	<i>Homo habilis</i>	Olduvai Gorge, Tanzania
KNM ER 1813	<i>Homo habilis</i>	East Turkana, Kenya
KNM ER 3733	<i>Homo ergaster</i>	East Turkana, Kenya
KNM ER 3883	<i>Homo ergaster</i>	East Turkana, Kenya
KNM ER 1470	<i>Homo rudolfensis</i>	East Turkana, Kenya
MH 1	<i>Australopithecus sediba</i>	Malapa, South Africa
Sts 5	<i>Australopithecus africanus</i>	Sterkfontein, South Africa
Sts 71	<i>Australopithecus africanus</i>	Sterkfontein, South Africa
SK 847	Early <i>Homo</i>	Swartkrans, South Africa
SK 48	<i>A. (Paranthropus) robustus</i>	Swartkrans, South Africa
OH 5	<i>A. (Paranthropus) boisei</i>	Olduvai Gorge, Tanzania
KNM ER 732	<i>A. (Paranthropus) boisei</i>	East Turkana, Kenya
KNM ER 406	<i>A. (Paranthropus) boisei</i>	East Turkana, Kenya

## References

- Thackeray, J.F. 2007. Approximation of a biological species constant ? South African Journal of Science 103, 489.
- Thackeray 1997. Probabilities of conspecificity Nature 390, 30-31.
- Thackeray, Bellamy, C.L., Bellars, D., Bronner, G., Bronner, L., Chimimba, C. Fourie, H., Kemp, A., Krüger, M., Plug, I., Prinsloo, S., Toms, R., Van Zyl, A.J. & Whiting, M.J. 1997. Probabilities of conspecificity: application of a morphometric technique to modern taxa and fossil specimens attributed to Australopithecus and Homo. South African Journal of Science 93:195-196.
- Aiello, L.C., Collard, M., Thackeray, J.F. & Wood, B.W. 2000. Assessing exact randomization-based methods for determining the taxonomic significance of variability in the human fossil record. South African Journal of Science 96:179-183.
- Wood, B.A. 1991. Koobi Fora Research Project, Volume 4. Hominid cranial remains. Clarendon Press, Oxford.
- Berger, L.R. et al. 2010. Australopithecus sediba: a new species of Homo-like Australopith from South Africa. Science 328, 195-204. (2010)
- Carlson, K. Science 333, 1402 (2011).
- Kibii, J. Science 333, 1407 (2011).
- Kivell, T.L. et al Science 333, 1402 (2011).
- Zipfel, B. et al Science 333, 1417 (2011).
- Dirks et al Science 328, 205 (2010)
- Pickering, R. et al Science 333, 1421 (2011)
- Wood, B.A. and Collard, M. Science 284, 65 (1999).

## 8th Annual Standard Bank - PAST Keynote Lecture

### *Skin: Its Biology in Black and White*

by Nina Jablonski

Skin colour is a biological characteristic loaded with cultural meaning. Skin pigmentation itself is a biological adaptation that regulates the penetration of ultraviolet radiation (UVR) into the skin. It is an evolutionary compromise between the conflicting demands of protection of the skin against UVR and of production of vitamin D by UVR. This compromise represents one of the best examples of evolution by natural selection acting on the human body. In the history of the genus *Homo* and of our species, *Homo sapiens*, skin pigmentation has been a highly changeable characteristic. Similar skin tones have evolved independently numerous times in response to similar environmental conditions. Skin colour thus is an entirely inappropriate characteristic for grouping people according to shared ancestry. The establishment of hierarchies of races based on preconceived notions of hierarchies of colour is a myth that has influenced the course of human history more adversely than any other. Understanding how skin colour evolved and came to have social importance is relevant to human health and wellbeing and the future of human societies.

#### **Biography:**

Nina Jablonski is a Distinguished Professor of Anthropology at The Pennsylvania State University in the United States. She studies the evolution of adaptations to the environment in monkeys, apes and humans. Her research comprises descriptive and functional studies of living and fossil primates and theoretical studies of aspects of primate and human traits not preserved in the fossil record.

Many of her studies have involved long-term collaborations with scientists in east and south Asia, and in eastern Africa. In the last 15 years, she has been increasingly absorbed in studies of the evolution of human skin and skin colour. Prof. Jablonski is a Fellow of the American Association for the Advancement of Science and the California Academy of Sciences. In April 2005, she was awarded one of first twelve Alphonse Fletcher, Sr. Fellowships for her research on the evolution of human skin color. She was awarded the 2007 W.W. Howells Book Award of the American Anthropological Association for her book, *Skin: A Natural History* (University of California Press, 2006). In 2010, she received an honorary doctorate from Stellenbosch University in South Africa for her research on the evolution and social ramifications of human skin pigmentation. She is currently a Fellow at the Stellenbosch Institute of Advanced Studies.

#### **Standard Bank-PAST Relationship:**

PAST was established in 1994 to promote the science of palaeontology in Africa, and has participated in a mutually rewarding association with the Standard Bank since 1998. Funding support from the Bank has had a profound influence on PAST's ability to advance the science. It helps PAST bring a knowledge of palaeontology in particular, and science in general, to school children from previously disadvantaged backgrounds through its acclaimed "Walking Tall" Educational Theatre Project. The Bank's support has also facilitated granting of bursaries and research funding by PAST to African scholars. Standard Bank is the exclusive sponsor and partner to PAST's Annual Lecture Series, which has brought the world's leading origin scientists to South Africa.



# Resuscitāre

Latin - meaning to revive, rouse again; reawaken (*re-* again + *suscitare*, revive)

## A Photographic Exhibition by Brett Eloff

'Resuscitāre' is a series of black and white images that were initially born out of a request from a handful of graduate student palaeontologists, palaeoanthropologists and archaeologists studying at a leading South African university faculty. These talented young men and women wished to be photographed naked for a calendar, hence the number of images being twelve.

Their original idea was of course based on the story of the Yorkshire 'Calendar Girls', which inspired the 2003 comedy film and ultimately gave rise to just about every such calendar, rendering the idea almost ubiquitous.

The nude calendar à la 'Calendar Girls' has become somewhat of a rite of passage in western contemporary popular culture and perhaps a symbol of social liberation for its participants.

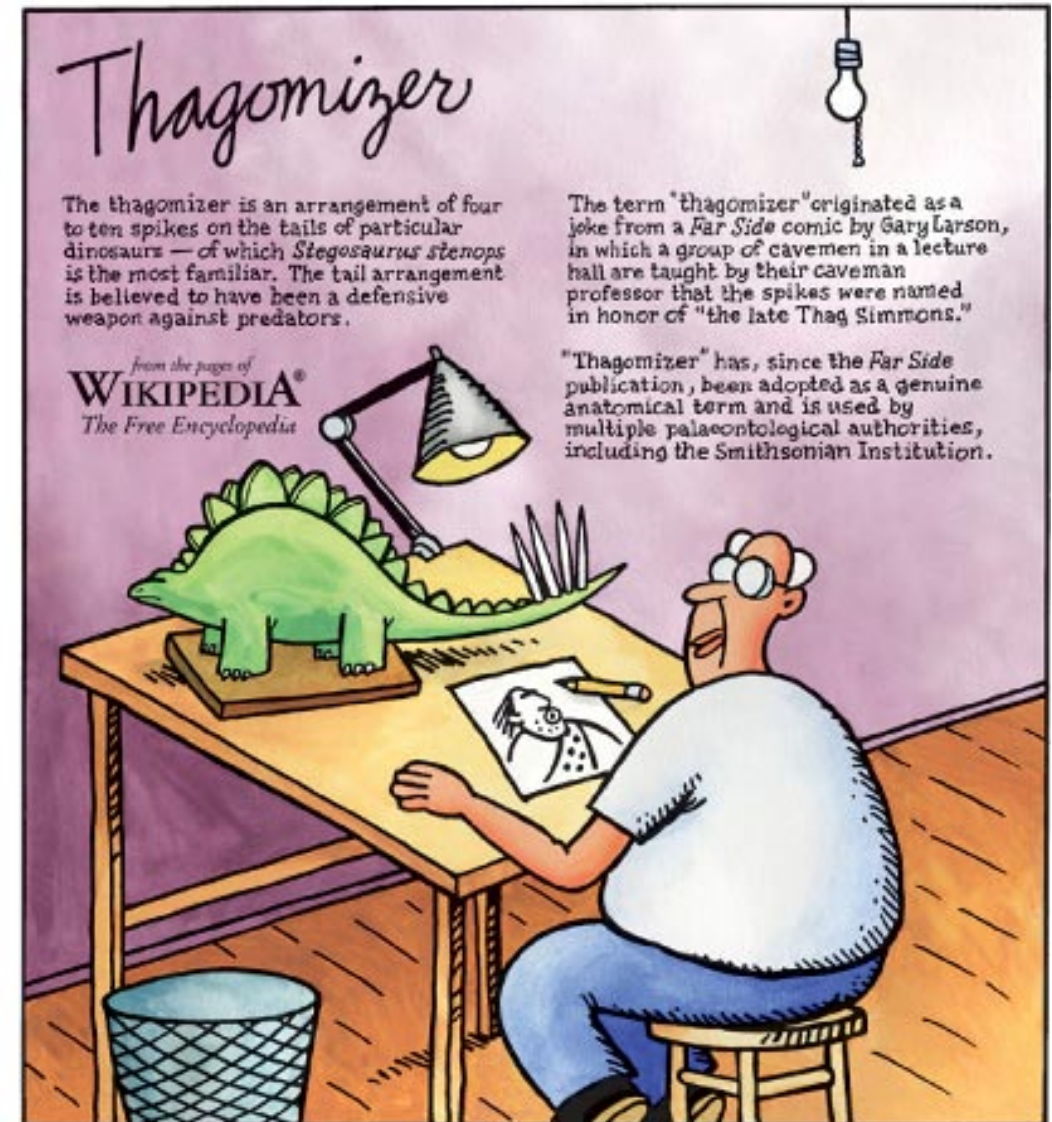
After some hesitancy on the part of the photographer to produce just another such calendar, the group, together with the artist, conceptualised a set of portraits, which would aim to represent each subject's specific field of study and would also form the basis for a series of classic and aesthetically inspired images.

The pictures were mostly taken in the winter of 2011 - and at a rate of only two or three at a time. News of the project spread quickly throughout the faculty which most of the students were affiliated to. Reaction from a few senior academics was quite negative, some even adopting a threatening stance. And even though one student withdrew from the project, the rest continued resolutely. The calendar itself though, is yet to be produced.

One of the project's main protagonists, Aurore Val writes: "These pictures have created quite an interesting debate and sometimes been misunderstood or misjudged, because of the proximity they bring between science and naked bodies. Depicting nude people together with their research object, has been considered by some as provocative and out of place. However, there is absolutely no will to shock, nor to provoke any institution, but just to resuscitate people's interest for something we are all passionate about, through the esthetic eye of an artist."

'Resuscitāre' will open at 12:00 on 11 August 2012 at the Resolution Gallery, 4 Chester Court, 142 Jan Smuts Ave, Parkwood; and run until 29 August 2012.

## WIKI WORLD<sup>®</sup> by Gary Williams



Text excerpted from the Wikipedia article *Thagomizer*. 2 Jan 2007

## PSSA MEMBERS AND FRIENDS - EMAIL

Abdala, Fernando  
 Allinson, Matt  
 Almond, John  
 Anderson, John  
 Anderson Holmes, Heidi  
 Angielczyk, Ken  
 Avery, Graham  
 Backwell, Lucinda  
 Baker, Stephanie  
 Bamford, Marion  
 Battail, Bernard  
 Bender, Patrick  
 Berger, Lee  
 Blackbeard, Marc  
 Blumenschine, Rob  
 Bordy, Emese  
 Botha-Brink, Jennifer  
 Boyd, Glen  
 BPI secretary  
 Braga, Jose  
 Brain, Bob  
 Brink, James  
 Browning, Claire  
 Butler, Elize  
 Carlson, Kristian  
 Chinsamy, Anusuya  
 Cisneros, Juan  
 Coates, Michael  
 Cohen, Brigitte  
 Cowley, Ron  
 Cruickshank, Enid  
 Damiani, Ross  
 de Klerk; Billy  
 de Klerk, Bonita  
 de Kock, Ellen  
 Döhne, Ludwig  
 Durand, Francois  
 Fourie, Heidi  
 Forster, Cathy  
 Franz-Ondaal, T.

Nestor.Abdala@wits.ac.za  
 mattallinson@hotmail.com  
 naturaviva@universe.co.za  
 Anderson@sanbi.org  
 hkhholmes55@bigpond.com  
 kangielczyk@fieldmuseum.org  
 gavery@iziko.org.za  
 lucinda.backwell@wits.ac.za  
 stephe@iburst.co.za  
 marion.bamford@wits.ac.za  
 bbattail@mnhn.fr  
 pkabender@yahoo.com  
 lee.berger@wits.ac.za  
 blackbeard.m@gmail.com  
 rjblumenschine@gmail.com  
 emese.bordy@uct.ac.za  
 jbotha@nasmus.co.za  
 glen@karkloof.co.za  
 bpipal@geosciences.wits.ac.za  
 braga@cict.fr  
 brainnew@iafrica.com  
 jbrink@nasmus.co.za  
 browning.claire@gmail.com  
 elizeb@nasmus.co.za  
 Kristian.Carlson@wits.ac.za  
 achinsam@botzoo.uct.ac.za  
 juan.cisneros@ufpi.edu.br  
 mcoates@uchicago.edu  
 jet-cohen@hotmail.com  
 ronc@mineval.co.za  
 plesiocruick@yahoo.co.uk  
 rossano1973@googlemail.com  
 B.deKlerk@ru.ac.za  
 bonita.deklerk@students.wits.ac.za  
 ellen@nfi.museum  
 doehne@global.co.za  
 fdurand@uj.ac.za  
 hfourie@nfi.museum  
 forster301@gmail.com  
 1tf Franzod@dal.ca

Gess, Rob  
 Gommery, Dominique  
 Govender, Romala  
 Grine, Fred  
 Groenewald, Gideon  
 Haarhoff, Pippa  
 Hancox, John  
 Haughton, Kimberly  
 Hiller, Norton  
 Hopson, Jim  
 Huttenlocker, Adam  
 Jasinoski, Sandra  
 Jinnah, Zubair  
 Johnson, Mike  
 Kammerer, Christian  
 Kemp, Tom  
 King, Gillian  
 Klinger, Herbert  
 Leenen, Andrea  
 Lehmann, Thomas  
 Leslie, Mary  
 Linkermann, Sean  
 Long, John  
 Loock, Johan  
 Maguire, Judy  
 Mason, Tom  
 Matthews, Thalassa  
 McKay, Ian  
 McKee, Jeff  
 McLachlan, Ian  
 Meyer, Lynn c/o  
 Mocke, Helke  
 Modesto, Sean  
 Mostovski, Mike  
 Mothupi, Tebogo  
 Nalla, Shahed  
 Neveling, Johann  
 Norton, Luke  
 Odes, Eddie  
 Oelofsen, Burger

robg@imaginet.co.za  
 dominique.gommery@evolhum.cnrs.fr  
 marinefossils@gmail.com  
 fgrine@notes.cc.sunysb.edu  
 gideon@bhm.dorea.co.za  
 pippah@iafrica.com  
 jhancox@cciconline.com  
 skimmyhoughton@gmail.com  
 nhiller@cantmus.govt.nz  
 jhopson@uchicago.edu  
 huttenla@u.washington.edu  
 sandra\_jas@hotmail.com  
 jinnahz@science.pg.wits.ac.za  
 mikedes.johnson@gmail.com  
 jonkeria@gmail.com  
 tom.kemp@oum.ox.ac.uk  
 gillianmking@virginmedia.com  
 hkling@telkomsa.net  
 past@fusionreactor.za.net  
 Thomas.Lehmann@senckenberg.de  
 mleslie@sahra.org.za  
 seanlinkermann@hotmail.com  
 jlong@museum.vic.gov.au  
 loockjc.sci@ufs.ac.za  
 questar@icon.co.za  
 trm@star.arm.ac.uk  
 tmatthews.matthews@gmail.com  
 ian.mckay@wits.ac.za  
 mckee.95@osu.edu  
 ian.mclach@gmail.com  
 hfourie@nfi.museum  
 helke.mock@gmail.com  
 Sean\_Modesto@uccb.ca  
 mmostovski@nmsa.org.za  
 tebogomothupi@yahoo.co.uk  
 shahedn@uj.ac.za  
 jneveling@geoscience.org.za  
 LNorton.za@gmail.com  
 eddieodes@gmail.com  
 boelofsen@mweb.com.na



Ovechkina, Maria  
Pereira, Lucille  
Pether, John  
Pickering, Robyn  
Pickford, Martin c/o  
Potze, Stephany  
Prat, S.  
Prevec, Rose  
Raath, Mike  
Renaut, Ray  
Roberts, Eric  
Rossouw, Gideon  
Rossouw, Lloyd  
Rubidge, Bruce  
Rust, Izak  
Schaafsma, Elizabeth  
Scott, Louis  
Senegas, Frank  
Senut, Brigitte  
Sidor, Chris  
Skinner, Matthew  
Smith, Roger  
Steininger, Christine  
Stynder, Deano  
Tawane, Mirriam  
Thackeray, Francis  
van den Heever, Juri  
van der Merwe, Mauritz  
van der Walt, Merrill  
van Dijk, Eddie  
Vasconcelos, Cecelio  
Vermaak, Marius  
Vilakazi, Nonhlanhla  
Warren, Anne  
Wolvaardt, Derik  
Yates, Adam  
Zipfel, Bernard

movechkina@mail.ru  
lucille.pereira@students.wits.ac.za  
jpether@iafrica.com  
robypickering79@gmail.com  
bsenut@mnhn.fr  
potze@nfi.museum  
sandrineprat@hotmail.com  
r.prevec@ru.ac.za  
mickraath@gmail.com  
sunflowers@ananzi.co.za  
haulbag@hotmail.com  
gideon.rossouw@nmmu.ac.za  
lloyd@nasmus.co.za  
bruce.rubidge@wits.ac.za  
icrust@iafrica.com  
elizabeth@vodamail.co.za  
scottl@ufs.ac.za  
frank.senegas@evolhum.cnrs.fr  
bsenut@mnhn.fr  
casidor@u.washington.edu  
skinner@eva.mpg.de  
rsmith@iziko.org.za  
info.humanorigins@gmail.com  
dstynder@iziko.org.za  
tawanem@yahoo.com  
francis.thackeray@wits.ac.za  
javdh@maties.sun.ac.za  
mauritzvdm@border.co.za  
Merrill.vanderwalt@wits.ac.za  
eddie@vandijks.com  
phoenixstarscry@yahoo.co.uk  
m.vermaak@ru.ac.za  
nhleiks2002@yahoo.com  
a.warren@latrobe.edu.au  
wolvaaf@westinghouse.com  
yatesam@gmail.com  
Bernhard.Zipfel@wits.ac.za

## New/Updated/Emended Email Addresses:

Johnson, Mike - mikedes.johnson@gmail.com



"Now this end is called the thagomizer...after the late Thag Simmons."

In his book *The Prehistory of the Far Side*, Gary Larson suggests that "there should be cartoon confessionals where we could go and say things like, 'Father, I have sinned - I have drawn dinosaurs and hominids together in the same cartoon.'"

**NEXT DEADLINE FOR CONTRIBUTIONS:**

**FRIDAY 18 JANUARY 2013**