

PAGES SSC MEETING
16-17 July 2004—Naivasha, Kenya
MINUTES

PRESENT: Rick Battarbee (SSC), Julie Brigham-Grette (Chair), Jérôme Chappellaz (SSC), Leah Christen (IPO), Carole Crumley (SSC, 17 July), Peter Kershaw (SSC), Christoph Kull (IPO), José Ignacio Martínez (SSC), João Morais (SSC), Dan Olago (SSC), Ashok Singhvi (SSC), Frank Sirocko (SSC), Olga Solomina (SSC), Ricardo Villalba (SSC), Pinxian Wang (SSC), Rosemary Otieno (START)

ABSENT: Keith Alverson (IPO), Eystein Jansen (SSC), Thomas Stocker/Heinz Wanner (SSC), Ryuji Tada (SSC)

1. INTRODUCTION & MISCELLANEOUS

1.1 Welcome New Members

Brigham-Grette welcomed everyone and gave an introduction to the meeting. SSC members introduced themselves and gave a brief summary of their background and their area of expertise.

1.2 Approval of Minutes from Past Meetings

Brigham-Grette summarized the minutes from Banff (SSC) and San Francisco (EXCOM), and they were approved without comment by the SSC.

Decision: Minutes are accepted.

1.3 Office Staff

Kull explained the changes to IPO staff and referred SSC members to the list of staff duties, activities and publications summarized in the meeting documents (p. 16-19).

Brigham-Grette briefly outlined the current funding situation and the implications for finding a new Executive Director. The discussion that followed is recorded in 8.1.

1.4 PAGES IPO

Kull reported on the office move and the change in PAGES legal status to that of a Swiss “Verein” (Association). PAGES’ bank accounts are now in the name of “Verein PAGES”.

SSC provided feedback that they thought the IPO was functioning well.

1.5 Visiting Scientist Program

Kull reported that the IPO now has a dedicated office for guest scientists and outlined other limited support available. He named the current and planned guests, and described the type of PAGES activities that visitors could be involved in while at the IPO: guest editing *PAGES News*, representing PAGES at meetings (especially in the transition period before the new Director), editing special journal issues, collaborating with scientists at the University of Bern, hosting a PAGES Summer School.

Sirocko: Organizing a summer school would be the most useful activity.

No decision was taken about the future of the program or the level of PAGES support.

2. FINANCES

2.1 Funding Overview

Brigham-Grette outlined the current funding situation. The suggestion that PAGES open a US dollar account was discussed. The University of Bern handles PAGES' funds and they do not, unfortunately, operate a US dollar account. They carry out the accounting and also allow PAGES to run a deficit, which is clearly beneficial. Brigham-Grette commented that if she were to oversee an account, her University would take half the money as overhead. It was agreed that the idea is too difficult and costly to consider for the present, however, that it would be tabled for future discussion.

Action: IPO to contact the University of Bern for comment about PAGES operating a US dollar account. *(done: not possible)*

2.2 General Remarks

Kull outlined the IPO's suggestions for lowering costs for 2005.

Singhvi: PAGES discussed increasing the fee for the OSM to raise some additional funds for PAGES.

Wang: We should try to keep the fee low so that people can afford to come. China will provide as much support as possible. PAGES should look for additional funding support to help lower costs.

The discussion that followed is recorded in 7.1.

Wang: We could produce a special OSM issue of the PAGES newsletter after the meeting. China would cover the cost. This would be a savings for PAGES.

All: Agreed.

2.3 Budget 2004/2005

The budget outlined was discussed. No changes were suggested.

Decision: Budget is accepted.

3. PAGES PRODUCTS

Kull summarized PAGES products, new developments in the Product Database and National PAGES.

Solomina: There is a lack of public relations for PAGES. Ask each person receiving workshop funding and each author helped to publish in a special issue to produce a single-page summary of their work written for the general public. These "General PAGES" would be a mirror of our special issue but addressed to a general audience. This should be included in the next NSF proposal.

All: General PAGES could include: What is Paleoscience? What is PAGES? Frequently asked questions.

Chappellaz: There are two levels of communication: synthesis and breaking news. Most newspapers and popular journals only want the news.

Christen: Solomina's idea is great. We could apply for an NSF grant for communicating science to the public for this.

Christen: One suggestion submitted to PAGES feedback was that PAGES publish a "paleoclimate" journal.

All: Too difficult and time-consuming for PAGES to consider at present.

3.5.3 A Paleo Web Portal

Kull provided an overview of the suggestion that PAGES IPO manage a "paleoclimate startpage".

Olago: A web-portal would generate a large amount of work for the IPO. Have a links page instead.

Solomina/Singhvi: Agree.

Christen: PAGES existing links page is not frequently visited but might be more popular if more effort was put into it.

Morais: Coordinate this with the IGBP communications and outreach strategy.

Brigham-Grette: IPO should reorganize the links page with suggestions from the SSC. We should discuss it in the NSF proposal and possibly ask for additional funds.

Martínez: A suggestion submitted to PAGES feedback was to add free software downloads to the products offered on the website. There could be a link for this.

Action: IPO to reorganize PAGES links page. SSC to send IPO suggestions for inclusion.

3.6 Newsletters

The OSM issue will highlight Chinese research.

Kull reported that the last newsletter was printed in India and that this will continue in the future. There might be a Polar Programs special issue in 2006.

Action: SSC to contact IPO with any ideas for special newsletter issues for 2006.

3.7 Special Issues

Kull announced that the PAGES Russian *Palaeo3* special issue has been published.

Battarbee reported that the publication date for the PEP III special issue is planned for October. The Limpacs/HITE brochure was discussed and it was proposed that it be produced to coincide with the OSM.

3.9 Posters

PAGES posters are available for SSC members to hang in their home institution and to display at meetings. SSC can contact the IPO or download the files from the PAGES website.

3.10 PAGES Flyer

Kull suggested that the PAGES flyer be reprinted in time for the OSM.

All: Agreed.

4. WORKSHOPS

Kull referred SSC members to the list of funded workshops, initiative and products summarized in the meeting documents and the list of pending workshop proposals that EXCOM would decide on at their evening meeting (p. 26-27).

5. RESEARCH REPORTS

5.1 Foci Reports

Kull presented a PowerPoint summary of the five PAGES Foci (available to download from the PAGES website in a more extensive form). Comments:

- Focus 1 PANASH—Has been very successful. IPO suggests that this focus could be reorganized into initiatives. The Chapman Conference on tropical-extratropical links planned for February 2005 and headed by Seltzer and Bradley will start down this road.
- Focus 2 CLIVAR/PAGES—At the recent Euresco conference, scientific research was discussed but not how to merge paleo and modeling. This could be a new initiative in the future.

- Focus 3 IMAGES—The office has moved and there has been a shift in leadership. This program continues to be successful.
- Focus 4 Polar Programs—Could sunset this focus and incorporate into an overarching initiative, e.g. Teleconnections and the incorporation of a CliC component. Euresco conference is planned for September 2004. IPICS meeting of nations doing ice-core work was held in March 2004 and a Whitebook was produced.
- Focus 5 Past Ecosystem Processes and Human-Environment Interactions—Strong links to IGBP. IPO suggests that this focus could be reorganized into initiatives. There are currently 3 sub-programs working independently. Gordon conferences to link all 3 are planned for 2005 and 2007. Archeologists offer great potential and should be involved in Focus 5.

5.2 National Science Reports and Highlights

Each SSC member provided an overview of paleoscience in their country. It was decided that these summaries should be available from the National PAGES and linked to the relevant SSC member.

Brief summary:

Singhvi (India)

2007 will be the International Year of Planet Earth. Earth System Sciences will play a major role in the future. Progress has been made in India but has not been well reported to policy makers and the public. Topics that have been discussed in an effort to reach these audiences are: groundwater, hazards, earth and health, climate, resources, megacities, deep earth and ocean. Paleo has an important role to play in the geosciences.

Solomina (Russia)

PAGES conference in Moscow helped to rebuild paleo in Russia after the disintegration at the end of soviet times. Russia now has a national database, special issue of *Palaeo3*, PAGES section in the *Proceedings of the Russian Academy of Sciences, Geographical Series*, PAGES section in the national issue of the *IGBP bulletin* and a national website is in preparation. Solomina presented PAGES at the World Climate Change Conference and CliC meeting in St. Petersburg. PAGES input in the Russian community has been great.

Villalba (Argentina)

There is a lack of information and communication in South America. People are working in isolated communities. The challenge is to coordinate with PAGES global community. Villalba highlighted the work of tree ring labs, pollen, glacial geology and oceanography, and coastal geology research groups. Argentina is establishing the highest tree-ring records worldwide, looking at tree-ring chronologies in the circumpacific and from S. to N. America, studying the forces affecting change in high latitudes, the interaction between the tropics and high latitudes, and using tree-ring chronologies to study AO, ENSO and AAO. This research fits into PEP I but is not integrated. Meetings planned for 2005 on catastrophes during the Holocene, and climate from treelines. Meetings planned for 2006 on climate sciences of the N. and S. American cordillera, and tropical-extratropical climate interactions in S. America.

Martínez (Colombia)

Colombia is an ideal location to do work on correlations between continent and ocean. Communication is also a problem in Colombia. There is a long history of paleoscience, a growing community and great potential but a lack of knowledge of PAGES and how to get involved (also mentioned in PAGES feedback). National PAGES is a good start but we need to do more to integrate with PAGES.

Olago (Kenya)

Most scientists in Africa are doing work within the area of PEP III. Olago summarized the key questions being studied by African scientists. Topics being studied include: linking tropical records of past climate change to global climate on various time scales; response and sensitivity of the African lakes, river

basins, terrestrial and aquatic ecosystems to climate change; origins of the great lakes; climate links to human migration and activities; comparing African records to centennial-scale oscillations in ice cores, looking at rapid change in lake sediments, interactions of tectonic forcing and mesoclimates in tropical Africa, etc. Olago discussed some of the initiatives, e.g. IDEAL, INQUA, AIACC, IGAC. PAGES is known by the older community but not by the young people.

Kershaw (Australia)

There is a need to start implicating humans, or something other than cyclicity, in our interpretations of data. Australia is a good location for looking at changes in landscape due to human influence, since Europeans only arrived 200 years ago. Marine environments are available for coring but there is not much on land because of aridity. In the southern areas, emphasis has been on studying billabongs. Major activities in Australasia include PALCOM (INQUA paleoclimate commission) with PASH 2 (land-ocean correlation of long records) and INTIMATE (integrating ice core, marine and terrestrial records), as well as research into past ecosystem processes and human-environment interactions, e.g. LIMPACS, who will hold a meeting in September/October on climate change and salinization over the last 500 years.

Kershaw: PAGES and INQUA overlap but INQUA has not drawn PAGES in to do the paleo work. PAGES has the networks needed. Is there something to the structure that has not allowed this?

Brigham-Grette: The two programs were very different before but there is now some overlap.

Sirocko: There will be more involvement in the future.

Brigham-Grette (USA)

US Global Change Program has become US Climate Change Program (see <http://www.usgcrp.gov/>). For most academic researchers, but not all, funds for research come from the NSF Paleoclimate Program and NSF Earth System History Initiative (NOAA extramural funding is now gone). Related topics in paleosciences are also funded in several places around the Foundation (eg. Polar Programs, Ocean Sciences and Earth Sciences), as well as several other federal agencies. Hot topics and areas of focus include Holocene climate variability, forcing mechanisms and impacts, abrupt climate change, regional patterns and phasing of change, and marine earth system history.

Sirocko (Germany)

DEKLIM (2001 to 2006) is currently the biggest paleo project in Germany. There are about 60 projects, 33 of which are paleo, grouped into 13 sub-projects, for which Sirocko is the speaker. Sirocko also heads one of the sub-projects. DEKLIM was established to connect the modeling, reconstruction and proxy communities. Goal is to increase predictability of climate models for the next 100 years. Looking at which part of the past is truly relevant to us for the future (next 100 to 1,000 years). There is PAGES/DEKLIM/(INQUA?) overlap. Conference planned for 2005 on climate of the next millennia in the perspective of abrupt climate change during the late Pleistocene.

Battarbee (UK)

Europe does not have an equivalent to the US NSF. Framework 7 will start in 2007. The EU is discussing whether there should be a European Research Council. Such a council would present PAGES with the possibility of putting in a long-term proposal for funding support. Battarbee summarized the European paleo contribution, including UK NERC programs: RAPID (Rapid Climate Change) and QUEST (Quantifying and Understanding the Earth System); EU integrated Projects (F6): Euro-LIMPACS and IMPRINT (proposal lead by Jansen, suggested that PAGES could become a partner) and; ESF: EuroCLIMATE (final open science meeting to be held in London in June 2006).

Chappellaz (France)

Paleoresearch is under the umbrella of INSU (Institut national des Sciences de l'Univers). There are two main national programs: PNEDC (climate dynamics, past, present and future—three projects organized on geographical themes plus paleo, considered the most structured: ocean, continents, ice cores, models;

calibration of proxies; abrupt events; interglacial variability) and ECLIPSE (focus on impacts and links with human history: climate environment and humans; long-term changes). Budgets are between 0.5 to 1 million Euro overall (not including salaries) and there are incentives from the Ministry but France still relies mostly on European funding. Difficulties arise because salaries are paid but researchers must seek separate funding for consumables, meetings, etc. Current initiatives: ESF EuroCLIMATE; national workshop to prepare answers for the 3rd Call for Proposals of 6th Framework; STREP within the 6th framework: EPICA-MIS; national committee being set up for the International Polar Year (2007/2008).

Wang (China)

The situation in China is encouraging. The Chinese government is making long-term plans for 15 years ahead. Despite the difficulties in doing this, it shows commitment to the future. One part of the plans is basic science, with a large paleo component, which should expect an increase in funding. On the other hand, China is restructuring scientific institutions and universities, so there will be fewer laboratories but more funding. PAGES-related activities in China include: Marine—China joined IODP in April. East Asia as a whole will become more involved in IMAGES and IODP work. Japan, Korea and China have been discussing future research in the Western Pacific area; Arctic studies; Terrestrial—will drill the Qinghai Lake in the framework of ICDP; IHDP—China is also involved and is increasing the number of laboratories working in this domain. China's focus at the moment is on the OSM. This opportunity will be used to highlight Chinese science and to organize the paleo community. There are many parallel activities that could be incorporated within PAGES; lots of people under several umbrellas. There is a need to have just one umbrella. National PAGES is in the pipeline.

Action: SSC members to send IPO national report summary (max. 3 pages) by 31 July.

5.3 Integration of PAGES and IGBP Programs

Brigham-Grette gave a PowerPoint presentation of the IGBP projects (available to download from the IGBP website). She expressed the opinion that paleo is and can become more of a linking theme. Other groups are measuring change but only for the last 50 years and we need them to think beyond that. From 1999-2003, IGBP was focused on synthesis, transition and restructuring. In 2004, there are now new questions and more of a focus on biogeochemical sciences with relevance to societal issues, and interdisciplinarity and integration within an Earth System context. Thresholds and rates of change could be something that PAGES introduces, e.g. for LUCC. We could morph the Foci to look at the dynamics of the system and integrate this within IGBP. PAGES should also integrate with other international organizations, e.g. WCRP (CliC). There should be joint projects on global sustainability issues—carbon, food, water, health. Regional activities are also important, e.g. integrating regional “hockey sticks”. PAGES should actively participate in the ESSP Open Science Meeting in 2006.

Morais: Integrated regional analysis at IGBP could be a contribution to CLIVAR and Focus 5. There will be an IHOPE Dahlem Conference in 2005. PAGES should participate.

Steffen (email): PAGES must be better integrated with the rest of IGBP but particularly with AIMES.

Prentice (email): The GAIM meeting in Japan in October will contain a significant paleoscience component, with distinguished paleoscientists on board from both the modeling and data communities. The opportunity to integrate PAGES should not be missed.

Morais (email): The AIMES-PAGES combined leadership in this regard are crucial to IGBP. It is important to inform AIMES of the Naivasha SSC discussions regarding the revamped agenda, and to make sure that the AIMES discussion in Japan reflects a collaborative spirit.

Morais provided some background information on the new IGBP director, Kevin Noone, who will take up the position on 1 September 2004.

6. STRATEGIC DISCUSSION I

6.1 PAGES Research Structure 2005 & Beyond

Brigham-Grette discussed the need to relook at PAGES research structure and described various ideas for the form that this could take. She also emphasized the need to integrate the feedback PAGES received into the future initiatives. After looking at the Foci in 5.1, she suggested keeping the successes and introducing new overarching goals. She proposed thinking of ways to integrate topics and then setting up timelines, with a beginning and end and set workshops in between, i.e. defined goals and timelines with periodic review. They should be overarching within PAGES but then also crosscutting with other IGBP groups.

Chappellaz: The difficulty with timelines is that PAGES does not fund research and so we are putting direction on basic research that might not be possible.

Brigham-Grette: Perhaps aim for those that are set up first.

Singhvi: We should first identify the themes and then work out how.

Sirocko: List topics, then put projects already in existence under them.

Brigham-Grette: Look at all the hot topics from SSC member countries and use this to develop themes that come from the community.

Battarbee: PAGES could propose overarching themes and then get the community to respond.

Kull: There are two types of PAGES' community with different needs, one that requires a network and the other that already has one established.

Solomina: Community-building needs to be a priority for PAGES.

Brigham-Grette: Workshops alongside SSC meetings are therefore important.

PAGES Focus

Singhvi: What is the focus for PAGES for the next 5-10 years?

Morais: Look at the big picture. Will PAGES operate as integrator as shown in the IGBP model?

Solomina: Use IGBP's model and add the "P" (paleo) element to each of their themes. This could extend to their website with a button to click to get to the PAGES-related project.

Chappellaz: Can we realistically have a PAGES representative in each core project?

Wang: Agree with Singhvi, we need to look at the general role of PAGES. Paleo may play the key role in global change studies for the future, it is the integration of global change in time and space. PAGES needs to do something that the other projects cannot do. There are three major tasks: synthesis and integration (e.g. global monsoon on different timescales, contact with biologists doing modern work); data production and directing data generation for use in modeling; education and outreach.

Kershaw: There has been a revolution in dating. Things can now be done that could not before.

Kull: Some of this fits within CLIVAR. PAGES could put effort into their meeting.

Battarbee: Move now into Earth System Science. We want to be interacting with climate modelers but by looking at the bigger system PAGES can integrate with all the themes.

Singhvi: Land-sea input into modeling is needed.

Sirocko: Agree with Battarbee, PAGES should focus on Earth System analysis.

Olago: Agree that there is a big gap in understanding of land-ocean linkages. However, we should back up a little more and ask why these objectives. Focus on a spatial and dynamic understanding of the Earth System on different timescales. We need a vision.

PAGES' Vision Statement

What follows is a summary of the resultant discussions leading to a statement of PAGES' vision.

Brigham-Grette: We want people to live in balance with the earth.

Singhvi: Sustainability of a habitable planet.

Battarbee: We need to articulate how the paleo approach can contribute to this understanding and integration of models in the future, e.g. disentangling natural variability from human impact. Ask what the models need.

Solomina: Produce the data that feeds the models. There is a need for forcings.

Crumley: PAGES feedback urged us to better integrate the human dimension. We consistently leave out the human forcing element. Perhaps it is because we do not understand that community or understand what would constitute outreach to that community. It would be easier for us to choose fields of study more closely linked to their data. We would then make allies in the struggle to get the two communities together. We should have a mosaic of different fields of study within a matrix that recognizes that concessions need to be made to include the human aspect.

Brigham-Grette: Overarching integration that involves humans in every aspect but brings in the paleo element.

Crumley: We also need the time element.

Kull: Think about how to integrate these various communities.

Battarbee: Identify what we can contribute.

Morais: Human dimensions must be integrated into the Earth System and Focus 5 is that contribution.

Brigham-Grette: That is the basis for the overarching themes.

Chappellaz: We have seen a change in policy making and funding, paleo is important but needs to be put in the context of the future. PAGES should show in its main aims that what we do better predicts the future; how Earth System analysis contributes to sustainability studies.

Sirocko: Prediction is important.

Battarbee: Paleo is not just paleoclimate. Understanding the climate system, improve understanding, improve models but then the bigger challenge of sustainability and what we can learn from the past and what the human impact has been.

Kershaw: Is there a natural climate system that has not had some human impact? Do not separate them. There need to be interactions between archeologists and paleoclimatologists.

Crumley: We need to think of another tool like PEP, e.g. look at the history of Hadley cells.

Brigham-Grette: Move beyond the PEPs into system dynamics.

Crumley: This allows us to think regionally.

Olago: Regionally significant but globally relevant.

The resultant vision as stated by Brigham-Grette was:

PAGES PROVIDES PALEO-PERSPECTIVES ON THE FUTURE SUSTAINABILITY OF A HABITABLE PLANET.

New Structure

The SSC then brainstormed scientific themes under two headings:

1. PAGES integration
2. PAGES/IGBP integration
(mechanisms to make the link stronger so as to reach out from PAGES to IGBP)

It was discussed that the two might merge but that this would take place in the future.

Following is the list of topics that were put forward:

1. PAGES integration
 - Tropical-extratropical teleconnections and dynamics
 - Human-climate and ecosystem interactions
 - Role of the poles in the system (IPY 2007-2008, PAGES-CliC intersection)
 - Land-ocean interactions, chronologies and correlation
 - Regional variability of the past 2,000 years
 - Rates of change analysis and the human dimension
 - Stability and duration of interglacials (paleoanalogs)
2. PAGES/IGBP integration
 - Paleobiogeochemical cycles
 - Paleohydrological cycles

- Ocean-atmosphere circulation
- GAIM 24 questions
- Sea-level change
- Role of life in the Earth System (future)
- Carbon cycle
- Paleo-hazards and recovery
- Biodiversity

The SSC was then tasked to develop paragraphs for each of these themes for possible inclusion in PAGES next proposal to NSF, and to develop these themes as initiatives for the science plan (see 10).

7. MEETINGS & OUTREACH

7.1 OSM 2005

Christen updated SSC members on the current status of OSM organization. The Call for Papers will be printed in India and sent out with the next newsletter in August. Christen outlined the IPO's OSM funding strategy and asked for support from the SSC in applying for grants for the participation of developing country scientists. The IGBP block grant will cover the cost of the SSC meeting before the OSM. Christen asked SSC members to do what they could to secure additional funds to help cover the costs of their attendance at the OSM. There was a brief discussion of the APN proposal and Singhvi suggested that Morais talk to Mitra at APN. Wang, Singhvi and Solomina (Program Committee members) met with Kull after the meeting to discuss the order of speakers in the preliminary program and other details that needed changing.

Decision: SSC members to help prepare OSM funding proposals if approached by IPO.

Action: IPO to email Alverson's APN article to SSC. *(done)*

7.4 PAGES Outreach

PAGES outreach was discussed at several points during the two-day meeting.

No concrete decisions were made about a PAGES Summer School, however the general consensus was that it is a good idea.

Decision: Idea of PAGES Summer School approved.

8. EXECUTIVE DIRECTOR

8.1 Executive Director Search

Various possibilities for finding a new Executive Director were discussed.

Kershaw: Could get someone on secondment for 2-3 years.

Brigham-Grette: We would usually expect someone to come for 4 or so years and then go back to their work.

Sirocko: Wait until the NSF grant is approved before advertising.

Brigham-Grette: NSF have indicated that they want an Executive Director for the new grant. However, a strong case can be made that PAGES is not just the Executive Director.

Morais: Since the process is underway, we should keep going but if there are no suitable applicants, PAGES should then start headhunting.

8.2 IPO Staffing

Kull explained the changes to staff workloads that will take place during the transition period before the new Executive Director.

9. STRATEGIC DISCUSSION II

9.1 Funding & Broader Impacts of PAGES Research Structure

Brigham-Grette and Kull summarized the Swiss NSF funding situation and reported that the last years of the current grant are contingent on PAGES securing US money. Brigham-Grette outlined how the US NSF grant application has been restructured. The name on the proposal will now be the IGBP Director, with PAGES as a sub-award. PAGES proposal, which is the only “non-science” proposal, goes out for peer-review and is competing against other requests.

Morais: Look for a third funder from the European community.

Brigham-Grette: This would make things more stable but the US might reduce their funds to compensate, so PAGES would be doing more work for the same money.

Wang: Now is perhaps not the time to talk about this. Wait until we know about the future. The Chinese NSF might also fund the IPO if it were to move there in the future.

Action: **IPO to find out Wendy Broadgate’s schedule for October to plan filing of NSF proposal. (PAGES can now file NSF proposal directly without going through IGBP)**

9.2 PAGES & Other International Programs

SSC discussed the questions, “What is PAGES?” and “How can PAGES best serve the paleocommunity?” Brigham-Grette explained the “paleo-coffeehouse” model—virtual meeting place for people to get together and discuss ideas.

Solomina: This is dangerous symbolism that could be misunderstood.

Singhvi: It looks somewhat casual.

Key services identified include:

- Facilitating and networking
Solomina: PAGES as a “market” where researchers can ask for what they need from others.
Wang: The “coffeehouse” idea.
Olago: Publicize this through the Paleodigest listserver. We need two-way communication.
- Holding workshops, meetings, PAGES Summer School
- Maintaining an effective website with links to, e.g. electronic journals and funding sources; downloadable PowerPoint presentations on particular topics with narrative; videos; software; freeware; information in different languages, answers to frequently asked questions

10. STRATEGIC DISCUSSION III

The meeting broke into groups to discuss the various initiative topics that had been suggested in 6.1, writing short summary paragraphs.

Battarbee: The NSF proposal needs to explain the process that resulted in the development of the new initiatives.

Battarbee: Keep some budget free for new initiatives that do not fit into the themes that we have identified.

Brigham-Grette: Agree. Have open themes.

Morais: The OSM is another way to make the whole community feel welcome to contribute.

Singhvi: Send paragraphs to colleagues all over the world to obtain comment.

All: Too difficult.

Kershaw: We already have feedback from the community.

Morais: IGBP would like PAGES to have a Science & Implementation Plan. This working document is a way to reach out to the community. The OSM would be a good time to launch it.

Kull: The plan should be PAGES Phase II. It is important that it comes out of the discussions today. However, we need to focus on the NSF proposal first.

Brigham-Grette: It is important to have references and figures for these paragraphs. The pieces should be written and passed around amongst SSC, with feedback by mid-August. The final deadline will be the 18 September EXCOM meeting.

Action: SSC to send Brigham-Grette figures and references for initiative paragraphs by mid-August. Brigham-Grette to circulate paragraphs for comment.

11. SSC: MEMBERSHIP & DUTIES

11.1 SSC Members

Four SSC members—Battarbee, Sirocko, Solomina, Wang—have served their first term, which will end in 2004. These members left the room while the remaining members discussed their renewal. SSC unanimously voted to renew each of the four for another term.

Singhvi: For the future, SSC needs someone from the Middle East. IGBP and PAGES are unknown in these countries. There is a meeting being organized in Tunisia in 2004.

Decision: Battarbee, Sirocko, Solomina, Wang are elected to a second term.

11.2 SSC Duties

Brigham-Grette listed the types of PAGES activities that SSC members should be involved in. Kull requested that SSC members act as PAGES ambassadors, especially during the transition period. He reminded the SSC that the IPO can provide slides, posters, etc.

Brigham-Grette: Do not ask what PAGES can do for you; ask what you can do for PAGES! (With apologies to J. F. Kennedy.)

Morais: Each SSC member should liaise with the IGBP representative in their country.

Chappellaz: Add a link to PAGES from your email signature.

Brigham-Grette: And a link from your own website.

Decision: SSC members to take on more PAGES responsibilities. Kull to remind.

12. VARIA

12.1 PAGES Strategy and Implementation Plan

Brigham-Grette outlined IGBP's desire to have PAGES produce a Science & Implementation Plan. She suggested it become a smaller, more streamlined plan than some of the other programs because PAGES is a different project, and recommended to start with the NSF proposal and add figures.

12.2 The New IPCC Report

Sirocko: Keep in mind that the IPCC fourth assessment report will have a large paleo chapter. PAGES should contribute to this chapter (did not for the third assessment report).

All: Villalba, Olago and Solomina are contributing authors on this chapter and should be independent from PAGES.

Kull: Paleo chapter could become an initiative.
Discussion ensued about the political implications of this.

12.3 Upcoming SSC and EXCOM Meetings

Villalba: An SSC meeting in South America similar to the Russia meeting would be ideal, perhaps in 2006.

Decision: **The next SSC meeting will be held alongside the OSM, on Monday and Tuesday, 8 and 9 August 2005 in Beijing, China.**
The next EXCOM meeting will be held alongside the Executive Director Interviews, on 18 September 2004 in Bern, Switzerland.