

PAGES EXCOM Meeting MINUTES
Villa Florence Board Room, 225 Powell Street
San Francisco, USA
9 December 2003, 8:00-16:30

SUMMARY OF DECISIONS:

- **PAGES to develop a new service-based agenda for IGBP S&I plan and next US NSF proposal, defining what can be offered. Foci to be eased out over the next few years as seems appropriate with SSC guidance to IPO.**
- **Draft IGBP document and NSF proposal to be presented for discussion at the SSC meeting in Jul. 2004.**
- **PAGES to call for international comment: place item in PAGES newsletter, on website, in EOS, etc. with May 1 deadline for comments.**
- **PAGES to set up a series of summer institutes.**
- **IGBP is the first choice for PAGES' legally responsible agency, University of Bern the second. Issue to be resolved as soon as possible, latest by spring 2004.**
- **Correspondence confirming workshop funding to include the statement "The PAGES funding you are receiving is available thanks to the U.S. and Swiss National Science Foundations and NOAA."**
- **PAGES logo must be included in workshop documents.**
- **Ideally workshop organizers should produce a peer-reviewed product, individuals a workshop report and science highlight.**
- **Foci and initiative leaders will be invited to attend SSC meetings as needed but will not be on the SSC.**
- **EXCOM nominates the following people to begin membership in 2004, and to be invited to the Nairobi SSC meeting: Jerome Chappellaz, Eystein Jansen, Peter Kershaw, José Ignacio Martínez, Ricardo Villalba.**
- **SSC members will be required to choose one or more tasks. Results will be discussed by EXCOM when considering term renewal.**
- **EXCOM nominates Battarbee as first choice to replace Markgraf, Sirocko as second.**
- **No decision on a new Vice-Chair was taken.**
- **Include plans for PAGES summer institute and future OSM in NSF proposal.**
- **Next EXCOM meetings will be held in Nairobi alongside the SSC meeting (16-17 Jul. 2004) and in San Francisco on 12 Dec. 2004 before AGU (13-17 Dec.).**
- **SSC meeting after next will be held alongside PAGES OSM (10-12 Aug. 2005), dates TBA.**
- **IPO will produce OSM Call for Papers with graphics input from China. Funders' logos to be included.**
- **OSM Registration & Abstract Deadline to be synchronized with IAMAS.**

SUMMARY OF ACTION ITEMS:

- **Brigham-Grette to send communication to SSC describing the proposed new direction for PAGES.**
- **IPO to write draft EOS news item, EXCOM to comment.**
- **Brigham-Grette to prepare outline of the IGBP document to discuss at the IGBP meeting in Moscow in Mar. 2004.**
- **Brigham-Grette/Alverson/Stocker to write draft NSF proposal during Brigham-Grette's IPO visit Mar. 2004. Draft to SSC and Verardo in Apr.**
- **Alverson to discuss accountability and legal entity issue with Will Steffen.**
- **IPO to include funding agency logos on website and newsletter.**
- **IPO to include on appropriate webpage the statement—"PAGES is not seeking workshop outcomes that generate funding recommendations."**
- **Stocker/Alverson to start discussions with Swiss NSF in Jul. 2004 to secure support for 2005 (even if US NSF decision is not known).**
- **Brigham-Grette to bring up the issue of inflation at the IGBP meeting in Moscow in Mar. 2004.**
- **Alverson to continue to investigate possibility of IPO receiving some funding as part of Framework 6 program.**
- **IPO to send emails to workshop organizers with EXCOM decision on their funding requests.**
- **Brigham-Grette to call foci leaders and send email to SSC to explain the change in direction for SSC composition.**
- **IPO to obtain complete nomination documents and email to Brigham-Grette.**
- **Brigham-Grette to send email to SSC to announce the nominations before sending them to IGBP.**
- **Brigham-Grette to inform Battarbee of his EXCOM nomination.**
- **Brigham-Grette to send draft of new mission statement to IPO.**
- **IPO to link to PROPER website or other public info, as soon as available.**
- **IPO to ask Susannah Elliott at IGBP to help with communication and media strategy for OSM (coordinating with IAMAS and NSF).**
- **IPO to find out which countries have advisories against Kenya and to call Dan Olago for his opinion, if appropriate. IPO to report back to EXCOM.**
- **IPO to contact OSM speakers to confirm new dates and their availability.**
- **OSM Call for Papers to be produced and distributed by Mar. 2004.**
- **Wang to send OSM logo and Chinese characters to IPO for comment.**
- **Wang to ensure PAGES & IAMAS local organizing committees coordinate.**
- **Wang to discuss OSM registration fee with Organizing Committee.**
- **Stocker to ask Heinz Wanner to replace him as Swiss Director.**

MINUTES:

Members: Julie Brigham-Grette, Ashok Singhvi, Thomas Stocker, Pinxian Wang

IPO Staff: Keith Alverson, Leah Christen

Guests: Dave Verardo, US NSF [8:00-10:00], Tom Pedersen, Past Chair [Dinner].

Regrets: Vera Markgraf, Will Steffen

Brigham-Grette welcomes everyone.

PAGES' Future Structure

EXCOM discussed the need to reevaluate PAGES' mission, structure and modus operandi and that any changes would need to be timed with the new Science Strategy and Implementation Plan for IGBP and funding application for the US NSF. Discussions centered on what needed to be changed.

Verardo: The major issue is what PAGES wants to be in the next 5 to 10 years: the same or something new? Large chunk of the U.S. community does not know what PAGES does. Concentrate on the negative review from the last proposal. We do need an international paleoclimate organization and PAGES does good science but things have changed since PAGES began 13 years ago. PAGES is still a personality-based organization.

Alverson: PAGES has done a lot to increase visibility: special issues in most major paleo-journals and sessions at every fall AGU meeting for the past five years. PAGES is truly a platform for bringing together people from many different disciplines. We are providing networking tools.

Verardo: I am concerned that most of the workshops are in countries other than the U.S. PAGES needs to involve U.S. scientists and to push U.S. membership to an international organization outside of the U.S.

EXCOM discussed what was needed to create the 'ideal' international paleoclimate program. Issues considered included:

- **PAGES as "paleo-coffeehouse".**

Brigham-Grette: I like Verardo's "paleo-coffeehouse" idea. We should think of ourselves as a forum for international collaboration.

Verardo: We fought hard to get paleoclimate into the Strategic Plan for the U.S. Climate Change Science Program in July 2003. PAGES should be the point of contact and broadcast needs, e.g. PAGES should be able to suggest lead authors to the IPCC.

Stocker: PAGES should be a body of experts.

- **Future role of Foci.** Terminate some foci? Concentrate more on Initiatives?

Alverson: Much of PAGES' energy is concentrated on foci, with various levels of success. We could try and shift our balance towards initiatives, which would be time limited and have concrete goals to achieve. Remove some foci that have already achieved clear goals (e.g. PANASH-PEPs) and others that are mature and self-supporting (IMAGES). This would free up resources to react to people in the community who suggest initiatives. More responsive, less pro-active.

Verardo: PAGES must be flexible enough to respond to requests.

Alverson: Our strategies should not dictate topics. PAGES should be a mechanism to generate topics and outline the tools available; fund workshops, bring people together.

Brigham-Grette: We would be more flexible but would still be doing what we are doing now.

Singhvi: Do both. Why do we want to remove what has worked well in the past? I suggest we continue the components we have, add the other dimension and ease the foci out over time.

Alverson: We already have both foci and initiatives. When conflicts arise we tend to support the foci, and have never actually funded an initiative. We need a structural change to PAGES to make initiatives work. Remove the structure and PAGES mode of operation will change. Ask foci to produce thematic initiatives.

Brigham-Grette: The SSC meeting in Banff discussed new overarching scientific topics, e.g. tropical/exotropical teleconnections, last millennium regional assessment, north Atlantic challenge.

Verardo: Use the U.S. science plan to find your topics, e.g. abrupt climate change. Base initiatives on science not on tools. Or on investigations of the suitability of a tool, e.g. speleothems.

Stocker: PAGES should take up a topic and produce a product, not an assessment. What would be a useful product?

Verardo: Synthesis.

- Should PAGES focus more on outreach and community support and less on a scientific agenda, or is the current balance about right?

Brigham-Grette: Without specific science, it would be difficult for reviewers to comment on our NSF funding application.

Verardo: Things must change to reflect the needs of the community or NSF will not continue funding. PAGES is a service organization, its purpose is not to set the science agenda for NSF. Up until now, PAGES' function has been confused.

Brigham-Grette: Our application could include what we have accomplished and focus on what we can do for the community.

Alverson: Money from NSF comes to support the IPO (e.g. website, databases), not to fund science

Verardo: The IPO is one of the most expensive offices. You must be able to justify that level of funding.

Singhvi: Is there a chance that funding to PAGES could be increased?

Verardo: No.

Brigham-Grette: Could PAGES be involved in the practical issues of making governmental contacts on request from scientists? For example to facilitate permission for fieldwork being done in nations other than your own.

Verardo: Provide a database of who to contact, links other than bench scientists.

Alverson: National PAGES on our website currently list PAGES scientists and funding agencies. We could expand to include government and other contacts.

Verardo: Think about including educational initiatives, e.g. Hold a PAGES "summer institute" every two years that rotates around the world.

All: Excellent idea.

- Ask for feedback from the PAGES' community?

Verardo: Get community feedback, a public "call for comment". Take out an advertisement in EOS—"We want your input in shaping the future of PAGES. What do you want from an international organization?" Leave it open; do not ask questions that lead the direction. Make it transparent, not anonymous.

Alverson: We did this three years ago but in our newsletter rather than in EOS.

Brigham-Grette: Also use list servers.

Decisions:

PAGES to develop a new service-based agenda for IGBP S&I plan and next US NSF proposal, defining what can be offered. Foci to be eased out over the next few years as seems appropriate with SSC guidance to IPO.

Draft IGBP document and NSF proposal to be presented for discussion at the SSC meeting in Jul. 2004.

PAGES to call for international comment: place item in PAGES newsletter, on website, in EOS, etc. with May 1 deadline for comments.

PAGES to set up a series of summer institutes.

Action Items:

Brigham-Grette to send communication to SSC describing the proposed new direction for PAGES.

IPO to write draft EOS news item, EXCOM to comment.

Brigham-Grette to prepare outline of the IGBP document to discuss at the IGBP meeting in Moscow in Mar. 2004.

Brigham-Grette/Alverson/Stocker to write draft NSF proposal during Brigham-Grette's IPO visit in Mar. 2004. Draft to SSC and Verardo in Apr.

IPO Funding Overview

- US NSF

This grant is for \$200,000 a year and runs from August 2002 to July 2005*.

A new US NSF proposal will be submitted to the Earth System History program deadline in October 2004. If accepted, this would mean continued funding starting August 2005, with no gap from the current grant.

*As a result of the Inspector General's recent audit of IGBP, the last year of this grant (August 2004 to July 2005) cannot be sent to PAGES via IGBP, as has happened in the past, unless IGBP agree to become PAGES' legally responsible agency.

Alverson: We need to find someone responsible for PAGES' accounts. Possibilities include the IGBP/Swedish Academy, the Swiss NSF or University of Bern.

Verardo: Think about the organization to whom you belong and why you would want to separate from them on this.

Brigham-Grette: Philosophically dangerous to separate the flow of funds from the flow of ideas.

Verardo: You need an explanation from Will Steffen. Talk to him about this as soon as possible and find out why IGBP does not want to be accountable.

Alverson: PAGES is the only core project that gets its funds passed through IGBP so financial and scientific responsibility are not generally equivalent

Verardo: NSF funds science workshops not workshops that generate funding recommendations. It is important for people receiving PAGES funds to understand where the money is coming from. You need to include funding agency logos on the website and newsletter to indicate the agencies that support PAGES. This will help with prestige and transparency.

Decisions:

IGBP is the first choice for PAGES' legally responsible agency, University of Bern the second. Issue to be resolved as soon as possible, latest by spring 2004.

Action items:

Alverson to discuss accountability and legal entity issue with Will Steffen.

IPO to include funding agency logos on website and newsletter.

IPO to include on appropriate webpage the statement—"PAGES is not seeking workshop outcomes that generate funding recommendations."

- Swiss NSF

This grant is for CHF350,000 a year and runs from January 2003 to December 2007*.

*The last 3 years of this 5-year grant are contingent on continued participation of the US NSF. It is imperative that Swiss NSF funding for 2005 be confirmed before the end of 2004 since the IPO cannot continue to operate past September 2004 without it.

Action Items:

Stocker/Alverson to start discussions with Swiss NSF in Jul. 2004 to secure support for 2005 (even if US NSF decision is not known).

- IGBP Block grant

This grant is for \$40,000 a year and runs from January 2003 to December 2013.

It was only 38,000 in 2003 but this is thought a temporary cost-saving measure.

Prior to 2003 it was 42,667 per year

Brigham-Grette: IGBP Block grant should increase to reflect inflation.

Alverson: Doubt IGBO will increase these, but no harm in pointing this out. The move to a new uniform \$40,000 amount for all core projects, except those that are shared with partner programs, was meant to address the past situation where different core projects received different amounts.

Action Items:

Brigham-Grette to bring up the issue of inflation at the IGBP meeting in Moscow in Mar. 2004.

- Strategy

According to IGBP, the IGFA agreement states that organizations at the core-project level should be entirely funded by the host nation. PAGES is an exception. Alverson reported that he is looking into EU funding but that too many funders would put a burden on IPO accounting.

Action Items:

Alverson to continue to investigate possibility of IPO receiving some funding as part of Framework 6 program.

Brigham-Grette thanks Verardo for coming and for his input.

Budget

- Financial summary 2003

Alverson went over budgets. Discussions ensued and the following was agreed upon:

	Budgeted	New estimate	Received/spent	Notes [sum done + planned]
Income				
Carryover from 2002	(31,000.00)	(30,994.95)	(30,994.95)	
Total Funding			479,680.33	
US NSF	290,000.00	195,000.00	90,630.71	Remaining FY02 (4/12th), will receive 5/12th of FY03
Swiss NSF	390,000.00	350,000.00	350,000.00	Swiss NSF did not increase support
IGBP	58,000.00	29,013.73	29,013.73	Drop in IGBP funding and value of dollar, Banff direct payment
Other	7,540.00	10,035.75	8,018.75	Holivar for newsletter (EUR 5200), returned deposit
Interest Rate			0.03	
Total Income	714,540.00	553,054.53	448,685.38	
Expenses				
Personnel Costs	341,150.26	341,816.38	309,780.60	No Science Officer Jan-May, cheaper staff
Office Costs	105,740.00	119,400.00	97,415.33	Office move
Office Travel	25,000.00	21,399.75	20,728.33	
Initiatives	196,950.00	79,509.65	68,914.15	
Publications	53,300.00	29,871.91	29,305.86	Dropped Newsletter, cheap Synthesis book
Total Expenses	722,140.26	591,997.69	526,144.27	
Income - Expenses	(7,600.26)	(38,943.16)	(77,458.89)	

Exchange rates: 1.45 CHF = 1 EUR, 1.30 CHF = 1 USD

- Initiatives summary 2003

Title	Date	Responsible	Amount Budgeted \$	Amount Budgeted CHF	New Estimate CHF	Amount Spent CHF	Notes
Pre-system Carryover					5,175.55	5,175.55	EXCOM 2002, etc.
Limpacs, Denmark	18-22 Jan.	R. Battarbee	5,000.00	7,250.00	3,942.48	3,942.48	
London, Focus 5	Jan.	J. Dearing	5,000.00	7,250.00			Payment with Reno
Pondicherry, India	10-15 Feb.	Anupama					Paid in 2002
SSC Banff	Jun.	K. Alverson	35,000.00	50,750.00	24,000.00	22,726.36	IGBP paid directly
INQUA Focus 5, Reno	Jul.	J. Dearing	5,000.00	7,250.00	13,836.00	13,836.00	Includes London
INQUA Plenary, Reno	Jul.	R. Bradley	1,000.00	1,450.00	2,686.95	2,686.95	
Swiss Summer School	Sep.	M. Grosjean	5,000.00	7,250.00	7,389.90	7,389.70	
CLIVAR/PAGES, Spain	11-16 Oct.	J. Overpeck	5,000.00	7,250.00			
IMAGES Holocene, Norway	Oct.	E. Jansen		3,250.00	3,250.00		Open call
Tree Rings, Tucson	Fall	M. Hughes	5,000.00	7,250.00			Deferred
EXCOM, San Francisco	Dec.	K. Alverson	7,000.00	10,150.00	5,000.00	1,748.34	To be paid in 2004
IMAGES SG, San Francisco	Dec.	M. Sarnthein		3,250.00	2,000.00		Open call, prob. 2004
LIMPACS Brochure	Publication	R. Battarbee	7,000.00	10,150.00			
Hite Brochure	Publication	J. Dearing	7,000.00	10,150.00			
Modeling Brochure	Publication	A. Paul	7,000.00	10,150.00			
GAIM	May	V. Markgraf			354.20	354.20	
Polar Programs		M. Saarnisto	5,000.00	7,250.00			
Polar Programs (November)	Nov.	D. Raynaud	500.00	650.00	1,000.00		
Savannah Meeting	Sep.	S. Metcalfe			7,080.00	7,080.00	
Visitor Support (Solomina)	Apr./Jun.	O. Solomina		3,000.00	2,025.27	2,205.27	
Visitor Support (other)				7,000.00	1,769.30	1,769.30	
Open Call for Proposals			25,000.00	36,250.00			
TOTAL			124,500.00	196,950.00	79,509.65	68,914.15	

- Financial summary 2004

Alverson went over budgets. Discussions ensued and the following was agreed upon:

Singhvi: PAGES should have a dollar account.

Alverson: NSF would not agree to PAGES having this account. It could work if IGBP or the University of Bern had one.

	Budgeted	New estimate	Received/spent	Notes [sum done + planned]
Income				
Carryover from 2003	(40,000.00)			
Total Funding				
US NSF	240,000.00			Exchange rate assumption
Swiss NSF	350,000.00			
IGBP	48,000.00			Exchange rate assumption
Other	13,500.00			PEP3 book reimbursement, DEKLIM Newsletter
Interest Rate				
Total Income	611,500.00			
Expenses				
Personnel Costs	373,832.90			
Office Costs	81,000.00			Efficient new office
Office Travel	25,000.00			
Initiatives	126,600.00			
Publications	34,500.00			Newsletter printing in India
Total Expenses	640,932.90			
Income - Expenses	(29,432.90)			

Exchange rates: 1.50 CHF = 1 EUR, 1.20 CHF = 1 USD

- Initiatives summary 2004

Title	Date	Responsible	Amount Budgeted \$	Amount Budgeted CHF	New Estimate CHF	Amount Spent CHF	Notes
CLIVAR/PAGES		A. Weaver & E. Jansen	5,000.00	6,000.00			
IMAGES		M. Sarnthein	5,000.00	6,000.00			
SSC Nairobi	16-17 Jul.	K. Alverson	33,000.00	39,600.00			
Tree Rings		M. Hughes	5,000.00	6,000.00			
Africa Meeting	Jul.	D. Olago	10,000.00	12,000.00			
EXCOM, San Francisco	Dec.	K. Alverson	5,000.00	6,000.00			
Pep3 Book	Publication	R. Battarbee	6,000.00	9,000.00			Expected income EUR 4000
Open Call for Proposals			40,000.00	48,000.00			
Visitor Support			5,000.00	6,000.00			Georg Hoffmann
		TOTAL	114,000.00	138,600.00			

Workshop Funding Requests

EXCOM discussed the submitted workshop proposals (see Appendix 1) and made the following decisions:

Workshop	Location & Date	Applicant	Request	Decision
Austral Summer Institute (ASI)	USA, Germany, UK 5-30 Jan. 2004	Carina Lange & Silvio Pantoja	\$5,026	\$5,000 for travel costs for developing country participants.
Integrated History and Future of People on Earth (IHOPE)	Stockholm, Sweden Spring 2004	Robert Costanza	Eur 5,000 (\$6,000)	No (no developing country participants).
Paleoclimate Proxy Data for Holocene East Mediterranean and West Asia	Berlin, Germany 29 Mar.-3 Apr. 2004	Harvey Weiss	\$9,500	Item 1—\$3,000 for travel costs for developing country participants. Items 2 & 3—No (do not qualify).
Indian Summer monsoon & Climate Variability During Holocene / Late Quat. Paleoclimate & Paleoceanography	Bangalore, India 17-18 May 2004 / 13-22 May 2004	Rupa Shankar	\$7,000	\$3,000 for young scientists from developing countries (not for conference /workshop organization).
Internat. Palynology Congress (IPC)	Granada, Spain 4-9 Jul. 2004	Rob Marchant	\$7,000- \$10,500	\$5,000 for developing country scientists if there is a PAGES session & planned peer-reviewed PAGES product.
Analysis of the Global Temperature Reconstructions for Last Millennium	Mexico 2004	Jorge Sánchez-Sesma	\$10,000	No (not applicable PAGES funding). Encourage “regional synthesis” submission for next deadline.
Inaugural LIMPACS Salinity Meeting	Mildura, Australia 30 Sep.-3 Oct. 2004	Peter Gell	\$6,000	No (insufficient information). Request resubmission for this or next deadline.
Internat. Workshop on ‘Volcanic Lakes’	Caviahue, Argentina 20-23 Nov. 2004	Joop Varekamp	\$9,500	No (scientific rationale & links to PAGES not clearly defined).
AOGS	Singapore Jul. 2004	Ashok Singhvi	\$5,000	No (insufficient information). Request resubmission for this deadline. <i>Withdrawn.</i>
IMAGES SC & ICP8	Biaritz, France 4-10 Sep. 2004	Ann Holbourn	\$10,000	\$5,000 already budgeted for SC. Encourage \$5,000 ICP8 submission for developing country participants for next deadline. <i>Resubmission: No (large conference).</i>

Alverson: I suggest PAGES does not support people to attend large congresses. In general, we should be focusing on meetings that specifically bring new communities together, add value through synthesis, or are leading towards a PAGES product. In exceptional circumstances this might include conference sessions, but only if the above hold true.

Brigham-Grette: Scientists receiving PAGES money should know where it comes from.

Singhvi: Ask individuals to produce a workshop report.

Alverson: PAGES usually asks organizers to produce a peer-reviewed product.

We could ask individuals to produce a workshop report and science highlight.

Stocker: Provide newsletter space to publish individual impressions of the workshop and scientific results.

Singhvi: I suggest we have two funding headings:

- workshop funding (PAGES-related workshops)
- capacity building (educational initiatives)

Decisions:

Correspondence confirming workshop funding to include the statement “The PAGES funding you are receiving is available thanks to the U.S. and Swiss National Science Foundations and NOAA.”

PAGES logo must be included in workshop documents.

Ideally workshop organizers should produce a peer-reviewed product, individuals a workshop report and science highlight.

Action Items:

IPO to send emails to workshop organizers with EXCOM decision on their funding requests.

SSC

- Composition

EXCOM discussed the current composition of the SSC and the under-representation of members from the southern hemisphere and developing countries.

Current members: (*IGBP representative)

Name:	Country:	1999	2000	2001	2002	2003	2004	2005	2006
R. Battarbee	GB				1	1	1		
J. Brigham-Grette	US		1	1	1	2	2	2	
C. Crumley	US			1	1	1	2	2	2
D. Olago	KE		1	1	1	2	2	2	
A. Singhvi	IN		1	1	1	2	2	2	
F. Sirocko	DE				1	1	1		
O. Solomina	RU				1	1	1		
T. Stocker	CH	1	1	1	2	2	2		
R. Tada	JP			1	1	1	2	2	2
P. Wang	CH				1	1	1		
J. Morais*	SE								

Brigham-Grette: If we are moving away from foci, then foci leaders should not necessarily be on the SSC. We are currently aiming for diverse geography and discipline. Do we want a new model?

Alverson: All the foci leaders are expecting to be on the SSC but their names have not been sent to IGBP. I suggest we take 3 foci leaders and 2 scientists from those nominated.

Stocker: We should not forget to strive for names that will make things happen in their area.

Alverson: We should have a critical mass of senior, internationally recognized scientists.

Brigham-Grette: The other suggestion put forward in Banff was to invite the foci leaders to the SSC meetings as guests.

Wang: But then there is the issue of payment.

Singhvi: I suggest foci leaders are invited to the SSC meetings as needed but not always

Decisions:

Foci and initiative leaders will be invited to attend SSC meetings as needed but will not be on the SSC.

Action Items:

Brigham-Grette to call foci leaders and send email to SSC to explain the change in direction for SSC composition.

- Nominations

EXCOM discussed nominations for the 5 vacancies that would bring SSC membership back up to 16. Discussions involved issues of timing (whether to phase in the new members or not) and numbers (whether to fill all vacancies).

Decisions:

EXCOM nominates the following people to begin membership in 2004, and to be invited to the Nairobi SSC meeting: Jerome Chappellaz, Eystein Jansen, Peter Kershaw, José Ignacio Martínez, Ricardo Villalba.

Action Items:

IPO to obtain complete nomination documents and email to Brigham-Grette.

Brigham-Grette to send email to SSC to announce the nominations before sending them to IGBP.

- Tasks

EXCOM discussed specific tasks and responsibilities that could be given to SSC members to further the aims of PAGES.

Suggestions included:

- Host PAGES “summer institutes”.
- Proactive development/solicitation of ideas for initiatives.
- Edit special journal issues.
- Edit newsletter issues.
- Visit the IPO.
- Work to increase PAGES participation and visibility in their region.
- Coordinate a national page for newsletter and website.

- Represent PAGES at meetings they are attending (talks/posters).
- Hang a PAGES poster in their home institution.

Brigham-Grette: I suggest SSC members choose a task they find most suitable to their country and area of expertise.

Decisions:

SSC members will be required to choose one or more tasks. Results will be discussed by EXCOM when considering term renewal.

EXCOM

- Nominations

EXCOM discussed who to appoint to replace Vera Markgraf. Candidates considered were Battarbee, Sirocko, Solomina and Tada.

Decisions:

EXCOM nominates Battarbee as first choice to replace Markgraf, Sirocko as second.

Action Items:

Brigham-Grette to inform Battarbee of his EXCOM nomination.

- Vice-Chair

Brigham-Grette: Chair needs to come from EXCOM but the understanding now from Verardo is that the Chair does not need to be from the U.S. So Vice-Chair (if seen as “chair-in-waiting”) would not need to be American.

Decisions:

No decision on a new Vice-Chair was taken.

Communication

Products

EXCOM reviewed major recent PAGES publications.

Alverson: Huge amount of energy was invested in writing the PAGES synthesis book but only 544 (including 100 to PAGES) have been sold. Better use of time to put out journal issues. There have been a lot of special issues produced by people not on the SSC. It would be nice for SSC members to get involved.

Outreach

- PAGES Young Scientists’ Day

A report of this activity held on 29 August 2003, as part of the NCCR Summer School, can be downloaded at:

http://www.pages.unibe.ch/calendar/2003/pages_discussion.html

EXCOM discussed ideas made by attendees on the day:

- Improve clarity and organization of “About PAGES” webpage

Brigham-Grette: We need a new mission statement on the website and flyer in light of the

discussion on PAGES future structure, e.g. “IGBP core project charged with *facilitating international collaboration* in developing a quantitative understanding of the Earth’s past climate and environment.”

- Involve guest scientist in “Ask an Expert” activity during their visit.

Brigham-Grette/Alverson: This has been tried in many ways and has not worked.

- Present “National PAGES” in the country’s official language, as well as English.

Alverson: Translating the National PAGES is already underway.

Action Items:

Brigham-Grette to send draft of new mission statement to IPO.

- PROPER

PAGES is involved in a series of five paleoclimate training courses being offered in 2004 and 2005. This is the result of a successful proposal to establish a European teaching platform for PhD students by implementing the new Marie Curie training site PROPER (**P**roxies in **P**aleoclimatology: **E**ducation and **R**esearch).

Action Items:

IPO to link to PROPER website or other public info, as soon as available.

- START/TWAS/ICSU Young Scientists’ Global Change Conference

The IPO was involved in organizing this first conference, providing a conference ‘mentor’ and is submitting a proposal to Elsevier for a special issue of *Global & Planetary Change* with contributions from the young scientists who attended.

Information about the conference is available at:

http://www.start.org/links/cap_build/young_scientist/ys_conference/ys_conf_home.html

- Future Strategies

EXCOM discussed suggestions on how to expand outreach and enhance PAGES’ visibility. These included:

- Involve media/general public (e.g. NSF grant: “Communicating research to public audiences”)

Brigham-Grette: *International Science News* and *Discover Magazine* are good ways to reach a wide audience.

Stocker: Need to be careful not to scoop results.

Brigham-Grette: And take care not to advocate.

Alverson: PAGES should help facilitate the dissemination of results.

- Include a science communicator on the SSC

Alverson: Richard Kerr (U.S. staff writer for *Science*) would be a candidate.

Stocker: Or Richard Stone (European news editor for *Science*), although he would not be as targeted.

- Hold open meetings and workshops

Wang: The Chinese government is developing science plans for 2005 to 2020. Inviting journalists and the media to the PAGES OSM is a good way to increase PAGES visibility in China.

Alverson: Ask speakers to issue press releases timed with the OSM.

Brigham-Grette: Plan for an OSM in the U.S. sometime in the future (2008).

Stocker: Plan a summer institute at a time good for the U.S. term (June 2005).

- Schedule SSC meetings alongside meetings/workshops in underrepresented regions
- Help establish intersections between various ESSP projects and PAGES
- Publish special journal issues on “bottom-up requests”
- Produce more thematically open PAGES newsletters
- Increase website activities (e.g. product database, National PAGES)
- Encourage guest scientist visits
- Develop strategies to better involve young scientists

Decisions:

Include plans for PAGES summer institute and future OSM in NSF proposal.

Action Items:

IPO to ask Susannah Elliott at IGBP to help with communication and media strategy for OSM (coordinating with IAMAS and NSF).

Office Update

- General

Alverson reported on the IPO’s new location.

Alverson: IPO staff is now very effective.

Kaspar Grathwohl, who has done outstanding work for PAGES, is leaving to finish his studies and is being replaced by Christian Telepski, a Computer Science undergraduate. PAGES will become a legal entity (a “Verein”) in Switzerland so that the bank accounts and office lease can be in PAGES’ name.

- Guest Scientists

EXCOM discussed potential and planned guest scientist visits. PAGES IPO has approved the following visits:

Name	Country	Proposed dates	Length of visit
Hoffmann, Georg	France	15.Mar.-15.Sep.04	6 months
Brigham Grette, Julie	USA	15-20 Mar.04	1 week

Verardo: I got the impression from the PAGES website that this service was to fund developing country scientists.

Alverson/Brigham-Grette: This is not the case. Scientists from all countries are welcome, and most have in fact been from developed countries since they need to bring their own salary.

Calendar

EXCOM reviewed major upcoming meetings and discussed dates and locations for the next SSC and EXCOM meetings.

Singhvi: I suggest we add a capacity building activity for students to the African paleo-meeting to take advantage of SSC members’ knowledge.

Alverson/Brigham-Grette: There is not enough time to organize this before then.

Brigham-Grette: PAGES could arrange this for the future, scheduled around SSC

meetings.

Brigham-Grette: The U.S. has issued a travel advisory for non-essential travel to Kenya due to fears of terrorist activities.

Alverson: The paleo-meeting has been announced and funding proposals are underway.

Stocker: Could move the meetings to Tanzania.

Alverson: Yes, funding is not contingent on location. We also have local contacts in South Africa.

Wang: Would South Africa be good for an African conference?

Decisions:

Next EXCOM meetings will be held in Nairobi alongside the SSC meeting (16-17 Jul. 2004) and in San Francisco on 12 Dec. 2004 before AGU (13-17 Dec.).

SSC meeting after next will be held alongside PAGES OSM (10-12 Aug. 2005), dates TBA.

Action Items:

IPO to find out which countries have advisories against Kenya and to call Dan Olago for his opinion, if appropriate. IPO to report back to EXCOM.

OSM

- Call for Papers

EXCOM looked over the IAMAS 2005 flyer and the IPO's draft Call for Papers.

Singhvi: I suggest we try to get a smaller, and therefore cheaper, B5 document.

Wang: Include more young people in the program. Replace me with Zhimin Jian.

Brigham-Grette: I suggest replace Danny Sigman (cancelled) with David Lee.

Alverson: Do we want to generate funds for PAGES from the OSM registration fee?

Wang: China would not be happy to see this.

Alverson: OK, we will not seek profit from the OSM. I suggest PAGES covers the travel costs of SSC members and invited speakers, and the total registration fees cover the local costs of speakers (e.g. hotel and registration).

- Timeline

EXCOM reviewed the proposed OSM timeline.

Decisions:

IPO will produce OSM Call for Papers with graphics input from China. Funders' logos to be included.

OSM Registration & Abstract Deadline to be synchronized with IAMAS.

Action Items:

IPO to contact OSM speakers to confirm new dates and their availability.

OSM Call for Papers to be produced and distributed by Mar. 2004.

Wang to send OSM logo and Chinese characters to IPO for comment.

Wang to ensure PAGES & IAMAS local organizing committees coordinate.

Wang to discuss OSM registration fee with Organizing Committee.

Miscellaneous

- Future Swiss Directorship

EXCOM discussed who might take over from Stocker when his term ends in 2004.

Alverson: PAGES needs a Swiss person to coordinate with the Swiss NSF.

Brigham-Grette: Continuity is also important.

Alverson: Heinz Wanner could be a possibility.

Stocker: Yes, if he agrees.

Brigham-Grette: If not, I suggest we ask Stocker to stay on.

Action Items:

Stocker to ask Heinz Wanner to replace him as Swiss Director.

- Other

No other items discussed.

APPENDIX 1

Workshop Funding Proposals

Austral Summer Institute

The Austral Summer Institute (ASI), now in its fourth year, has been developed as part of a cooperative agreement between the Universidad de Concepción (Chile) and Woods Hole Oceanographic Institution (U.S.A.) and is funded mainly by the Fundación Andes (Chile). This year's coordinators are Drs. Carina Lange and Silvio Pantoja (Universidad de Concepción).

The ASI aims to improve, strengthen, and promote higher education and research in physical, chemical, and geological oceanography and related biological oceanography, with special attention given to the eastern South Pacific off Chile. This year's ASI will deal specifically with biogeochemistry, paleoceanography, and paleoclimate.

The main workshop products are the accelerated development of geochemistry and paleoceanography by promoting future cooperative research with scientists from a variety of universities and institutions and a "Science Highlights" article for the PAGES newsletter.

The professors and classes to be offered at the ASI-4 are as follows:

05-09 January 2004

Dr. Anthony Rathburn (Indiana State University) "Marine productivity and seasonality: Responses of microbenthos in oxygen-poor environments, past and present"

Dr. Lloyd Keigwin (Woods Hole Oceanographic Institution) "Topics in Quaternary ocean and climate change"

12-16 January 2004

Dr. John M. Hayes (Woods Hole Oceanographic Institution) "Isotope Biogeochemistry"

Dr. Jürgen Rullkötter (University of Oldenburg, Germany) "Molecular organic geochemistry"

19-23 January 2004

Dr. Jennifer Pike (Cardiff University) "Quaternary ocean and climate history from laminated marine sediments"

Dr. Daniel Repeta (Woods Hole Oceanographic Institution) "Organic compounds as tracers for paleoclimate"

26-30 January 2004

Dr. Christopher Charles (Scripps Institution of Oceanography) "Ocean chemistry and climate change on timescales of decades to millennia"

Dr. Robert Dunbar (Stanford University) "Air-sea interactions and the global carbon cycle: A paleoclimate perspective from the tropics to the poles"

PAGES funding will be used to finance the travel of participants travelling from outside of Chile; we are presently able to cover room and board for all participants, but transportation only for those travelling within Chile. This year, several highly qualified scientists living outside of Chile applied to the program. These participants (two

Colombians, one Brazilian, one Chilean, and one Peruvian) would not only make an important contribution to the ASI by widening the knowledge base during the institute, but would also reap invaluable benefits, as most are working in areas where biogeochemistry, paleoceanography, and paleoclimate are not widely researched. By including them in the ASI, we hope to encourage new lines of research at their respective universities. Their flights have been priced at US \$5026.00.

Other financial support has been obtained from Fundación Andes (Chile), and POGO (Partnerships for Observation of the Global Oceans).

Integrated History and Future of People on Earth (IHOPE) Scoping meeting for a proposed research activity of the Earth System Science Partnership (ESSP)

Summary

The history of people on earth has traditionally been cast in terms of the rise and fall of great civilizations, wars, and specific human achievements (i.e. agriculture, industrialization). This history leaves out the important ecological and climate context which shaped and mediated these events. The capability to integrate human history with a fairly detailed and spatially explicit natural history of the earth over the last 8,000 years now exists. The goal of this initiative is to produce an integrated history of the climate, atmospheric chemistry and composition, material and water cycles, ecosystem distribution, species extinctions, land use systems, human settlement patterns, technological changes, patterns of disease, patterns of language and institutions, wars and alliances, and other variables on earth from several new and existing data sources that would provide a much richer picture of how (and why) the planet has changed in recent times. This integrated history will serve as an improved basis for studies from various perspectives of the earth's history and possible futures. It will also be used as a core data set to test integrated models of humans in natural systems. The subset of models that exhibit skill in replicating the integrated history of humans on earth can then be used to make projections into the future with much higher confidence.

Scoping Workshop Goals and Products:

We propose to hold a 2-day scoping workshop in the Spring of 2004, at KVA, The Royal Academy of Sciences, Stockholm, to (1) determine the best strategy to achieve IHOPE (2) draft proposals for funding and (3) to plan subsequent scientific activities, including a Dahlem Conference which has already gained preliminary fast track approval for 2005 (Will Steffen, pers. comm.).

The results of the workshop will include: (1) a widely distributed report which lays out the group consensus on the major questions and how to proceed; (2) draft proposals for funding the project and an action plan for moving forward until funding is obtained; and (3) planning for the Dahlem Conference

Participations will include representatives of the following groups:

- A group of about **15 scientists** (see preliminary list below) representing the full range of natural and social science disciplines and ESSP projects, namely PAGES, GAIM, LUCC, and LAND,
- Major inter-regional Scientific networking agencies, e.g. APN, IAI, EU (self-funded)
- International and National Funding agencies e.g. IGFA, FORMAS, RJF, ESF (self-funded)

Total: 22 participants (12 to be funded and c. 7 self-funded, 3 being based in Stockholm and not requiring funding)

Financial support

(Tentative figures, calculated for a 2-day meeting in Stockholm, using current ICSU rates)
Estimated costs per participant (12 persons): travel c. 750 Eur (subtotal 9,000 Eur) and accommodation 100 Eur/day x 2 days (for 12 participants)= 2,400 Eur

Total travel and accommodation: **11,400 Eur**

We are requesting 5,000 Eur from PAGES to support travel and accommodation costs for this workshop (other support from KVA and other sources is pending).

Timeline

- Dec 2003: Terms of reference to be circulated and participants selected
- Dec /Jan 2003: send invitations
- March 2004: programme posted. Papers submitted earlier will be posted on a web site to initiate early discussion.
- May-June 2004: Scoping meeting at KVA in Stockholm

Preliminary list of potential scoping meeting participants

1. Alverson, Keith	PAGES IPO, Switzerland	alverson@pages.unibe.ch
2. Costanza, Robert	University of Vermont	Robert.Costanza@uvm.edu
3. Crumley, Carole L.	University of North Carolina	crumley@email.unc.edu
4. Dearing, John	University of Liverpool	J.dearing@liv.ac.u
5. Folke, Carl	Stockholm University, Sweden	calle@system.ecology.su.se
6. Graulich, Lisa	University of Montana	lisa@montana.edu
7. Jaeger, Carlo	Potsdam Institute	carlo.jaeger@pik-potsdam.d
8. McConnell, W.	LUCC Focus 1 Officer	wjmconn@indiana.edu
9. Morais, Joao	IGBP	morais@igbp.kva.se
10. Moran, Emilo	Indiana University	Moran@indiana.edu
11. Oldfield, Frank	IGBP-PAGES	f.oldfield@btinternet.com
12. Prentice, Colin	Max Plank Inst. Germany	cprentic@bgc-jena.mpg.de
13. Schellnhuber, John	Tyndall Centre	H.J.Schellnhuber@uea.ac.uk
14. Steffen, Will	IGBP	will@igbp.kva.se
15. Svedin, Uno	FORMAS, Sweden	uno.svedin@formas.se
16. van der Leeuw, S.E.	University of Paris, Sorbonne	vanderle@mae.u-paris10.fr

Comment on IHOPE Proposal: Frank Oldfield

1. Given the difficulty in providing any kind of support for integrating Focus 5 into the other, most directly relevant, major strands of IGBP, we must take IHOPE very seriously. It promises a potentially strong and fruitful convergence with Focus 5 aims, provided sufficient positive interaction can take place right from the beginning.
2. Despite reservations, some of which are set out below, I believe it would be vital for PAGES to be strongly represented at the scoping meeting. I would even try to 'piggyback' my own participation on a planning session for a HOLIVAR Meeting I'm co-organising with Karin Holmgren in Stockholm.
3. I agree with you regarding participation from developing countries, but find it extremely difficult to identify any colleagues with the required international perspective. Perhaps they should come from non-PAGES areas of interest, in which case, it might be for Joao to think about this question. One Asian who could possibly make a very good contribution, having worked closely with colleagues in India and China on books dealing with global agricultural history and deforestation would be Yoshinori Yasuda. I know this does not meet your point in any way, but I have his major books here and find his breadth, humanistic perspective and scientific concerns quite fascinating.
4. I find both the temporal framework too rigid. For example, I think one could not realistically begin consideration of Mediterranean ecosystems and societies any later than 4000 BP. On the other hand, I doubt if there would be much point in going back more than 1k years in much of the high latitude northern hemisphere.
5. I find the goal of 'global' history unrealistic. There are just too many gaps in knowledge, both biophysical and cultural, as well as in terms of contributing personnel. Both this reservation and the one above could be tackled head on in a good scoping meeting (and perhaps, a definition with hyper-ambitious, global aspirations is needed to motivate financial support in this day and age).
6. The thrust of the proposal towards integrating empirical and modelling/palaeo- and contemporary/biophysical and cultural research communities finds a strong echo in my write-up of the paper I gave in Lund **(1)**. The degree of convergence surprises me **(2)** and further reinforces my view that the initiative should be one for PAGES to work with rather than downplay or ignore.

(1) "One possible way forward is for researchers from either side of the biophysical:cultural divide to pose questions arising from their own studies and experience that seem to require both kinds of perspective. Out of these may develop hypotheses linking both kinds of processes interactively. These in turn should generate models that can be tested against the full range of empirical evidence. At the stage where testable models are developed, there might be a much better chance of using the insights gained from the past to inform the business of providing future impact scenarios. Perhaps this is a long shot and it certainly is not a simple research agenda, but I can see no other way of bridging the several gaps outlined in this paper – between biophysical and cultural perspectives; empirical and model-based modes of research; past reconstruction and future scenario development."

(2) My only previous direct contact with Bob Costanza was at a UN-sponsored writing meeting where we held strongly opposed views. In retrospect, I think his was more forward looking and defensible than mine, so I'm surprised to see the main thrust of the IHOPE proposal.

Paleoclimate Proxy Data for Holocene East Mediterranean and West Asia Workshop

I have organized the "Paleoclimate Proxy Data for Holocene East Mediterranean and West Asia" Workshop, March 29-April 3, 2004, Berlin, in association with the 4th International Congress on the Archaeology of the Ancient Near East. Both the Workshop and the Congress will be held in the facilities of the Freie Universität Berlin.

This workshop aims to synthesize the proxy data retrieved from ice, lake, marine and speleothem cores across West Asia and adjacent regions (see attached figure) to establish coherent (in-phase) and synoptic (simultaneous) sequences of natural Holocene climate stages and abrupt events defined by their precipitation, temperature, seasonality, and other qualities. This synthesis may provide a base-line for building regional prehistoric and ancient agro-production functions and for distinguishing anthropogenic from natural environmental alterations during the period 11.5 - 2 kaBP.

Papers to be presented and discussed will focus upon individual proxy records and archives, the quantification of proxy values and the precise dating which permits measures of coherent and synoptic regional climate.

The workshop is scheduled within the 4ICAANE program as a two-day session running from 8 a.m. to 12 noon each day, with summaries at dinner each evening.

Participants:

- Miriam Bar-Matthews, Jerusalem
- Utz Böchner, Hannover
- Stephen Burns, UMass, Amherst
- Mauro Cremaschi, Milan
- Françoise Gasse, CNRS
- Stefan Kröpelin, Köln
- Mike Krum, Leeds
- Catherine Kuzuçölü, CNRS
- Anne Muller, Magdeburg
- Antje Schwalb, Braunschweig
- Mike Staubwasser, Oxford
- Lonnie Thompson, OSU
- Elise van Campo, CNRS
- Harvey Weiss, Yale
- Bernhard Weninger, Köln
- Lucia Wick, Zurich
- Kathy Willis, Oxford
- Yoshinori Yasuda, Kyoto
- Yehuda Enzel, Jerusalem

Additionally, several researchers from Russia, Syria, India and Pakistan, with important hi-res regional paleorecords, have expressed their interest to participate if travel funds should become available.

Schedule:

Day 1: 4 hours, 8 papers

Day 2: 4 hours, 8 papers

Day 1 and Day 2 will be hosted by the 4th ICAANE at Freie Universität Berlin.

Day 1 and Day 2 evening dinner discussions will initiate regional syntheses and the definition of new research frontiers.

Two reports of this Workshop are planned. The first, to be submitted immediately after the Workshop, will be presented to PAGES for publication and will comprise a three- or four- page (published) synopsis of the workshop's presentations and a summary of results. The second publication is intended as a special issue of a journal, such as *The Holocene*, and will comprise the publication of all the papers presented at the Workshop.

I believe that this workshop is essential for bringing the latest, high resolution records to the attention of the Near Eastern archaeology community which is, after all, the community with the world's highest resolution records for early-mid-Holocene archaeology. The "human dimensions of global change" concept has hardly penetrated the archaeological community. At the same time, scant knowledge of the significance of the archeological record has penetrated the paleo-community. Third, the exceptional record for the YD, 8.2, 5.2 and 4.2 kaBP events in the Eastern Mediterranean and West Asia requires some systematic analysis—and we hope this Workshop will initiate that effort.

I would like to request PAGES assistance to provide:

1. Air travel for persons from several impoverished countries (e.g., India, Pakistan, Syria, Egypt), especially younger researchers and, if possible, myself (ca. \$6K).
2. A grad student - temporary - assistant to edit and order papers for publication [experience suggests this is essential, otherwise the organizer sits, swamped, for years] (ca. \$3K),
3. Two dinners at which ca. 25 participants can debate and analyze together and articulate the research frontiers immediately confronting us (ca. \$500).
4. There are presently no other sources of funding. If PAGES funding is available, I request that it be provided on a submit-receipts-to-PAGES-basis.

Many thanks for your consideration.

Harvey Weiss

Attached: NOAA-provided website

http://www.ngdc.noaa.gov/paleo/meetings/icaane2004_workshop.html

for Holocene Paleoclimates workshop, Berlin, map of paleo-proxy sites, bibliography.

Harvey Weiss

Yale University

New Haven CT 06520 – 8236

An International Workshop on the Indian Summer Monsoon & Climate Variability during Holocene

May 17-18, 2004, Bangalore, India

A Short Course on Late Quaternary Paleoclimate & Paleoceanography

May 13-22, 2004, Bangalore, India

The Indian Summer Monsoon is a topic of great interest as it affects the climate and influences the agricultural economy of a large proportion of the Indian population. Too little or too much of the monsoon has proved disastrous. Predicting the behaviour of the monsoon is crucial, and for this a clear understanding of the past trends in climate, particularly during Holocene, is a pre-requisite. Paleoclimatic information may be obtained from instrumental/historical records and also from a variety of archives of paleo-information like lacustrine and marine sediments, tree-rings, speleothems, ice cores and peat bogs.

Recent studies have shown that greenhouse gas forcing is becoming increasingly important in global warming. Climatic changes in the future, therefore, will be dependent both on natural variability and anthropogenic changes in climate. In this context, it is important to decouple the two and examine, in particular, the natural variability, which is recorded on time scales of years, decades, centuries and millennia.

*Realising the importance of this issue, the Geological Society of India is organizing an International Workshop on the **Indian summer monsoon and climate variability during Holocene**, May 17-18, 2004 in Bangalore to stimulate interaction and discussion on these aspects among invited scientists from India and abroad.*

Some of the crucial issues that would be addressed during the Workshop are:

- How and why did the Holocene climate vary on different time scales?
- How well do well-dated marine and continental records match?
- Are there new instrumental / historical data for the Indian summer monsoon?
- Are there new paleoclimate proxies?
- Is there a relationship between the Indian summer monsoon and the adjoining ocean basins?
- What is the forcing mechanism for the century- to millennial-scale climatic changes?
- How can information on paleoclimate and its variation improve the performance of climate models?
- How can the Indian summer monsoon be modeled effectively, using General and Regional Circulation Models?
- How well can these models explain past climatic changes?
- Can the Indian summer monsoon be predicted effectively?
- How will the population adapt itself to the changing climate in future?

The following scientists will be participating in the workshop and making presentations: U. von Rad, M. Sarnthein, A Braeuning, M Staubwasser (Germany), D.M. Anderson (USA), Yanni Gunnell (France), R. Wason (Australia).

R Narayan Iyengar (IISc, Bangalore), J. Srinivasan (IISc, Bangalore), Sulochana Gadgil (IISc, Bangalore), Ashok K. Singhvi (PRL, Ahmedabad), Sampath K. Tandon (University of Delhi), Ganeshaiyah, (UAS, Bangalore), R. Ramesh (PRL, Ahmedabad), P. Divakar Naidu (NIO, Goa), Rupa Kumar Kolli (IITM, Pune), V. Purnachandra Rao (NIO, Goa), Anil K. Gupta (IIT, Kharagpur), Shyam M. Gupta (NIO, Goa), Vishwas S. Kale

(University of Pune), K. Anupama (French Institute of Pondicherry), A.C. Narayana (CUSAT, Cochin), Amalava Bhattacharya (BSIP, Lucknow), Devesh K. Sinha (BHU, Varanasi), Arun Deo Singh (CUSAT, Cochin), Hema Achyuthan (Anna University), M. Thamban (NCAOR, Goa) and R. Shankar (Mangalore University), (all from India).

The papers presented at the Workshop, after peer review, will be published as a Memoir of the Geological Society. A plan of action would be prepared to chart the future course of research endeavours in the topic of the Workshop.

Concurrently, a Short Course on LATE QUATERNARY PALEOCLIMATE AND PALEOCEANOGRAPHY would be organized during May 13-22, 2004 for 20 research fellows, recent Ph D's and young faculty members working in this discipline. Topics are: An overview of Paleoclimate and Paleoceanography and their importance; Milankovitch hypothesis; Dating methods (C-14, Excess Pb-210, U-Th series, TL & OSR, Alkenone and Amino acid racemisation methods); Stable isotopes of carbon and oxygen; Paleo information from different types of archives (Instrumental, Historical and Archaeological data, Tree rings, Ice cores, marine and Lacustrine sediments, Speleothems, Sand dunes, Riverine deposits); Different approaches to paleo research (stable isotopic, geochronological, pollen, micropaleontological, rock magnetic, clay mineralogical); and Modelling. Morning sessions will have lectures and discussions whereas the afternoon ones will be devoted to microscopic, rock magnetic and PC-related practical work.

Funds that may be available for the Workshop and Short Course:

Geological Society of India	Rs 50,000
Department of Ocean Development	Rs 100,000
Department of Science & Technology	Rs 50,000
Council of Scientific and Industrial Research	Rs 50,000
Indian Space Research Organisation	Rs 30,000

PAGES funds would be utilised for the travel, board and lodge of scientists, and participants from SE Asian region including India, and organization of the Workshop and Short Course.

Comment on Indian Proposal: Dan Olago

Dr. Rupa Shankar must have by now submitted a funding application for the workshop and short course that will be held in Bangalore, India, May 17-18, 2004. I am in support of this application particularly since it sustains the momentum that was gained during the PUNE workshop in 2001. It is encouraging to see that the palaeo-community in India is now growing and active.

We hope for the same outcome for the PAGES-Africa meeting.

International Palynology Congress (IPC), Granada July 2004 (<http://www.11ipc.org>)
Late Quaternary tropical ecosystem dynamics: climate, ecological and human impacts.

Convenors: Rob Marchant, Trinity College Dublin and Hermann Behling, University of Bremen

Aim of the session

The aim of this session is to emphasise the importance of tropical palaeoecological records from Central/South America, Asia/Australia and Africa as being highly sensitive archives of ecosystem change; it is intended to achieve this broad aim on three fronts by focusing the session into the following areas.

Ecosystem change: How do tropical ecosystems record and respond (e.g. in terms of floristic composition, biodiversity and vegetation structure) to Quaternary climate changes? How normal are the non-modern analogue environments of the last glacial period (in terms of CO₂, temperature, precipitation)? How has a dynamic ocean circulation influenced terrestrial ecosystems during the past? What are the spatial linkages, both inter-hemispheric and inter-tropical (ITCZ, Monsoon systems, etc.), and what can the character of these links tell us about the forcing mechanisms driving ecosystem changes?

Human dimensions: This part of the session aims to deal with the issues of detecting and understanding human-induced signals within sedimentary records. We would like this to go beyond presentations that solely document forest clearance but develop concepts behind interpreting change. For example, to what extent are current biogeography and biodiversity patterns a legacy of human disturbance over previous millennia?

The future: What can Quaternary palaeoecology teach us about likely tropical ecosystem responses/feedbacks to predicted future climate environmental change? What are the predicted future scenarios of continued deforestation and habitat fragmentation? How are the links between the palaeoecological and climate modelling communities developing? What is the place of tropical palaeoecology in global change science?

Other pending or obtained support

We are encouraging and aiding people to support their own participation by applying to The International Federation of Palynological Society (IFPS) Award Fund, The American Association of Stratigraphic Palynologists (AASP) and the 11 IPC Organizing Committee Award scheme. The total in these funds is some US\$ 20,000 that is spread thinly across the conference participants (approximately 1500) and will be mainly aimed at covering registration costs.

Planned workshop products

Publication arising from the session will be in the form of a special issue of *Quaternary Research* to which all those presenting will be invited to contribute. Discussions with Alan Gillespie on the nature and timing of the issue have been completed with an issue date of July 2005 pencilled. This will be a dedicated volume to the session that will be edited by the convenors.

Planned use of PAGES funds

Given the number of people from developing countries, we would like to be able to offer some assistance to attend so that there is a good range of tropical researchers. It is envisaged that any PAGES award will be divided amongst those participants traveling from developing countries, and institutions that are not able to support attendance. Partial support of approximately \$500-750 would be made to people giving presentations 10,

12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23 and 26. This level of support will require a PAGES award between \$7000-\$10,500.

Likely keynote speakers

It is expected that the number of people attending the session will grow over the coming months with a full program to be finalized by March 2004. A provisional division of those wishing to give poster and oral presentations is indicated in the associated running order. It is envisaged this will develop over the coming months as people learn about the conference (2nd circular sent October 2003) and are able to commit to the tropical session.

Rob Marchant and Hermann Behling

Analysis of the global temperature reconstructions for last millennium

Over the last years, the phenomena of global warming has been a subject of great interest, and as a result an impulse was given to better understand the variation of global temperature (GT) on larger time scales. This should permit not only to have a better knowledge of the present GT changes but also to see how GT has been varying over the past and how it may vary into the future. The latest research on recent climate variability is increasingly tending to the view that future climate change will be the result of interactions between the effects of human-induced changes and the effects of natural variability.

Several climate reconstructions have been made for the last millennium, with different and sometimes controversial results which mainly put forward the natural variability of GT (Esper, 2002, Broecker, 2001). These reconstructions, that extend the instrumental record backwards in time, are based on several proxy records of climate change contained mainly in naturally occurring archives, such as tree-rings, ice core layers, boreholes and glacial advances. Also, these reconstructions employ different statistical techniques in the calibration and backward extrapolations of climate records. This diversity of information and methods, in which climate reconstructions are recently based, produce a wealth of alternatives, but also possible significant differences in the results.

It therefore appears necessary to examine the relevance of the past climate reconstructions, and this is what this workshop intends to do by reviewing the global temperature reconstructions for the last millennium done in the last years. This workshop will mainly consider the basis (data and methods) and results of the recent contributions to global climate reconstructions. A recent comparison of previous work done by Mann et al, (1999), Esper et al, 2002, Mann et al, (2003), and Sánchez-Sesma, (2003a), has been made by Sánchez-Sesma (2003b). This comparison has detected coincidences and also differences between the reconstructed records, confirming the occurrences of two well-documented climate extremes known as the Medieval Warm Period (MWP) and the Little Ice Age (LIA), and giving the elements to analyse the natural contribution to the recent global warming.

The proposed workshop has the following characteristics:

Goal. This workshop to present, analyse, discuss, and plan the research activities of GT reconstructions for the last millennium.

Products. This workshop will allow to obtain:

- a) a summary of the workshop
- b) proceedings to be sent to a special issue of a peer reviewed publication (*Holocene or Climatic Change*)
- c) a review of the state of knowledge of this subject
- d) a PAGES workshop report
- e) proposed research and funding sources for future work.

Keynote speakers. Michael Mann, Raymond Bradley, Malcolm Hughes, Keith Briffa, Philip Jones, Edward Cook, Jan Esper, Frits Schweingruber, Thomas Crowley and Jorge Sánchez-Sesma.

Economical Plan.

(PAGES funds 10,000 USD\$)

Promotion (Poster, invitation)	1,000
Webpage	2,000
Conference Facilities, Food & transportation	1,500
Language Translation (English-Spanish/Spanish-English)	1,000
Edition and publication of Proceedings (100 volumes)	2,000
Publication of a review paper	500

Other pending support. (4,500 USD\$)

IAI (a computer devoted to a Web page for climate and hurricane reconstructions)	3,000
Mexican Universities and Government (Environment Ministry)	1,500

References.

Broecker, WS, 2001, Was the medieval Warm Period Global? *Science*, **292**, 1497.

Esper J, Cook ER, and Schweingruber FH, 2002, Low-Frequency Signals in Long Tree-Ring Chronologies for Reconstructing Past Temperature Variability, *Science*, **295** (5563), 22 March 2002, 2250-2253.

Mann ME, Bradley RS, and Hughes MK, 1999. Northern Hemisphere Temperatures During the Past millenium: Inferences, Uncertainties, and Limitations. *Geophysical Research Letters*, **26**, 759.

Mann ME, Rutherford S, Bradley RS, and Hughes MK, and Keimig FT. 2003. Optimal Surface Temperature Reconstructions Using Terrestrial Borehole Data. *Journal Geophysical Research – Atmospheres* **108**, D7.

Sánchez-Sesma J. 2003a. *Analysis and Synthesis of Climate Change*, PhD Thesis, UNAM, Mexico.

Sánchez-Sesma J. 2003b. Global Temperature (GT) Reconstructed Records for the Last Millenium: A Review. (Submitted to the *NASA-CRCES-IPRC Workshop on Decadal Climate Variability* to be held in Kona Hawaii, February, 2004.)

Inaugural LIMPACS salinity meeting

In association with Sheri Fritz, I am conveyor of the salinity/salinisation sub-group within LIMPACS. We are hosting the inaugural LIMPACS salinity meeting here in Mildura, Australia from September 30 to October 3 2004. My research associate, Jennie Fluin, is presently in London with Rick Battarbee discussing LIMPACS matters leading up to this meeting. They advise me that there is a PAGES meeting next week and that I should approach you for support sooner rather than later. We have raised ~ US\$6000 from the University of Adelaide to support Jennie to assist organising the meeting (and to support a participant) and I have made an initial approach to the Australian Government for further financial assistance. We would also very much like to support scientists from developing countries to attend the meeting to maximise our geographic breadth. While we are still finalising our list of participants, we would be seeking representatives from Mexico, Argentina, China, Russia and North Africa. A contribution of US\$6000 from PAGES would ensure that we had representatives from at least three of these regions. We would very much appreciate it if you could make a case for funding support for our meeting. We will be publicising it through the PAGES newsletter very shortly and providing a meeting report after its completion.

Kind regards
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An International Workshop on 'Volcanic Lakes'**To be held at:** Caviahue, Province of Neuquen, Argentina, November 20-23, 2004.**Organizers:** Johan C, Varekamp (Wesleyan University, USA), Anne Müller (UFZ, Magdeburg, Germany), Alain Bernard (Free University, Belgium), Adriana Bermudez and Daniel Delpino (University de Comahue, Argentina)

Volcanic lakes tend to contain well-preserved sediment sequences that are very suitable and often used for climate change studies. High-resolution records with excellent age control through tephrochronology can be obtained, but water compositions in such lakes are periodically influenced by volcanic inputs which may impact the interpretation of environmental change records contained in the sediments. Specifically, volcanic heat inputs (enhanced evaporation resulting in isotopically heavy water, which could be interpreted as a climatic signal), isotopically distinct fluid inputs (e.g., volcanic CO₂ will impact the isotopic composition of sedimentary carbon, impacting ¹⁴C dating and δ¹³C records) as well as fluid inputs rich in P and Si (creating diatom blooms) may cause such interferences. Some volcanic lakes are suitable for studies of "life in extreme environments" (e.g., bacterial communities in acid waters) and 'high altitude volcanic lakes' are studied as analogs for extraterrestrial environments. Direct effects of volcanic activity on local and global climate can be derived from these lake sediment sequences as well.

We plan to hold a workshop (two days of talks, one day fieldtrip) to provide opportunities for exchange of information on 'Volcanic Lakes', the global change records they contain, their natural hazards, their use in volcano-monitoring, and public health aspects. Keynote speakers to be invited will include George Kling, University of Michigan, USA (Volcanic CO₂ in lakes), Martin Grosjean, University of Bern, Switzerland (Paleoclimate records from high-altitude volcanic lake sediments), and Professor Walter Geller, UFZ, Germany (acidified lakes). The venue is Caviahue, Argentina, a small ski resort in the eastern Andes with several hotels, easy access by bus from airports, and modest cost because of the favourable peso exchange rate. The acid Lake Caviahue underneath the volcano Copahue provides a suitable fieldtrip destination. The tourist industry has been hurt by the minor volcanic eruptions of 2000 and a conference will stimulate the local economy.

We expect 50-60 participants, about half from the Climate Change community and half from the volcanological community. To defer costs of attendance for participants from mainly East European countries and developing nations, we request funds for 15 participants from less-favoured regions of Europe, from SE-Asia and Africa at \$750 each to partially defer their travel and attendance costs. We request an additional \$2000 to defer costs for 5 attendees from South America, for a total of \$9500. A proposal for financial support for the organization and support of USA and Argentine participants has been sent to NSF. The workshop is planned directly following the 2004 IAVCEI conference in Pucon, Chili, which will be attended by many volcanologists. The publication of the conference proceedings in the form of a monograph or special issue of a journal has already been discussed with Elsevier and will also be discussed with AGU publishers at the fall meeting.

The organizers represent the 'Climate Change' community (Anne Müller, who works at UFZ and thus has an extensive network of connections in Eastern Europe; she also works in South East Asia and she has a long-term commitment to work on climate change records in Chile and Argentina), the leaders of the IAVCEI 'Committee on Volcanic Lakes' (Varekamp and Bernard) and two local Argentine scientists who will help with the logistics.