Dear 2ker’s,

This 2k Circular is intended to keep you up-to-date on each of the regional Working Groups with details of upcoming regional meetings, funding deadlines and information on modeling, databases and websites. We intend to produce 2k Circulars regularly so please keep us informed of activities, publications and other information relevant to the 2k Network. Feel free to forward this circular on to interested colleagues.

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1) SCHEDULE OF THE PAGES 2K INITIATIVE

As discussed at the first PAGES 2k Network meeting in Corvallis, 2009, each of the eight regional Working Groups should aim to hold a regional workshop or meeting during 2010.

The entire 2k Network will then meet alongside the July 2011 INQUA meeting in Bern, Switzerland. It is intended that a 2k-focused session will be held on the **27 July** as part of the INQUA program, and a separate 1-day workshop will take place on the **28 July**.

2) FUNDING OF REGIONAL WORKSHOPS

Each regional Working Group that requires meeting support from PAGES must apply for funding using the online proposal forms (see below). Based on this proposal, the PAGES Executive Committee (EXCOM) will decide the level of funding, however PAGES support is generally **no more than $10,000 USD**. In the last funding call, PAGES EXCOM agreed to support the Africa2k, Aus2k, LOTRED-SA Working Group meetings, and a methodological-based North America meeting.

The next funding call will close on **15 May 2010**, with decision in early June (note: this will be the last funding call for meetings intending to take place in 2010). The call after that will be mid-November and decided mid-December.

To submit a funding request please submit your proposal using the **Working Group online form** at [www.pages-igbp.org/resources/support/](http://www.pages-igbp.org/resources/support/). If you have questions regarding the funding process please contact Louise Newman.

3) RESOURCES AVAILABLE TO GROUPS

The PAGES 2k Network has a website [www.pages-igbp.org/science/last2millennia](http://www.pages-igbp.org/science/last2millennia) where you can find information on Working Groups, meetings and publications (Note: use the blue links within the 2k Network webpage, rather than those in the left-hand orange panel). Those that were not present at the 2009 Corvallis meeting may find it useful to download the meeting minutes, available from the 2k Network products website ([www.pages-igbp.org/science/last2millenniaproducts](http://www.pages-igbp.org/science/last2millenniaproducts)).

PAGES also offers each regional group the opportunity to develop a regional website, with information on the aims of the regional group, the people involved, and relevant publications and meetings (see examples of active group websites provided via links under section 4 below). Each regional group can also have a regional Metadatabase,
developed by PAGES and linked from the group website. If you would like either of these facilities for your group please contact Louise Newman.

**4) ACTIVITIES OF REGIONAL WORKING GROUPS**

**AFRICA 2k:**

**Steering Committee:**
Mohammed Umer (Leader), Brian Chase, Stephan Grab, David Nash, Sharon Nicholson, Tim Shanahan, Dirk Verschuren.

**Meeting:**
Africa2k received PAGES support to hold their first regional workshop.
*Date:* 12 – 14 May 2010, Ghent, Belgium
*Objective:* This meeting will be a small, focused workshop involving the group leaders and a handful of other key researchers. Objectives are to 1) Conduct an audit of existing paleoenvironmental records, and create a pan-African synthesis of environmental change spanning the last 2 ka. 2) Identify and obtain well-dated annual to decadal records of rainfall variability within the last 2 ka that have the potential to be linked to historical accounts and observational data.

*Meeting website:*
www.pages-igbp.org/cgi-bin/WebObjects/calendar.woa/wa/calendar?id=367

*Group Website & Metadatabase:* Not yet developed.

**ANTARCTICA 2k: (with IPICS 2k)**

**Steering Committee:**
Marcel Küttel, Eric Steig, David Schneider (Leader to be determined).

**Activities:**
No meeting is currently planned for this group. However, Marcel Küttel has just started a postdoctoral position to develop spatial reconstructions from high-resolution ice-core records. The IPICS 2k community will contribute data by the end of March for its inclusion in these reconstructions.

*Group Website & Database:* Not yet developed.
Steering Committee:
Atte Korhola (Leader), Pierre Francus, Darrell Kaufman, Dorthe Klitgaard-Kristensen, Karl Kreutz.

Activities:
No meeting is currently organized for this Working Group. A postdoctoral position at the University of Helsinki has recently been created for the collation and synthesis of Arctic 2k data.

Publications:
Although not specifically resulting from Arctic2k activities, the special issue *Late Holocene climate and environmental change inferred from Arctic lake sediment*, guest-edited by Darrell Kaufman, was published in the *Journal of Paleolimnology* (41) in 2009. For other relevant publications see [www.pages-igbp.org/science/2k/arctic2k/publications](http://www.pages-igbp.org/science/2k/arctic2k/publications)

Group Website & Database:
[www.pages-igbp.org/science/2k/arctic2k/](http://www.pages-igbp.org/science/2k/arctic2k/)

ASIA 2k:

Steering Committee:
Takeshi Nakatsuka (Leader), Hemant Borgaonkar, Brendan Buckley, Edward Cook, Quansheng Ge, Olga Solomina.

Activities:
The leadership of this group was recently finalized and plans are being made to hold a regional workshop in late 2010.

Group Website & Database: Not yet developed.
AUSTRALASIA 2k:

**Steering Committee:**
Chris Turney (Leader), Joelle Gergis, Andrew Lorrey, Jonathan Palmer, Stephen Phipps.

**Meeting:**
Aus2k received PAGES support to hold their first regional workshop.
*Date:* late May 2010, Melbourne, Australia
*Outline:* This meeting will have two parts. The first 2 days are open to all, with plenary lectures and open poster and oral sessions, with the aim to showcase new records and communicate the Aus2k effort to the broader community. The last 2 days are for a smaller group of researchers that will scope out sub-regional synthesis papers and populate the metadatabase with records.

*Meeting website:* Currently under development.

**Group Website & Database:**
[www.pages-igbp.org/science/2k/aus2k/](http://www.pages-igbp.org/science/2k/aus2k/)

EURO-MED 2k:

**Steering Committee:**
Jürg Luterbacher (Leader), Keith Briffa, Ricardo Garcia-Herrera.

**Meeting:**
Plans are being made for a meeting of this group to be held in late 2010. This will be a small, focused meeting with the aim to develop the group’s action plan and identify the key records available for the regional synthesis.

**Group Website & Database:** Not yet developed.

N. AMERICA 2k:

**Steering Committee:**
Caspar Ammann (Leader), Eugene Wahl (co-leader), Nick Graham.
Meeting:
The leadership of this group is likely to expand to include researchers from Canada and Mexico. A PAGES-supported methodological workshop is being planned for late 2010 with a focus on the theoretical and practical aspects of using Bayesian hierarchical models for climate field reconstructions and to compare this to existing methods. It is intended that one representative from each of the other 2k regional groups will also be invited to attend this meeting. Details are still being organized but please contact Eugene Wahl \( \text{Eugene.R.Wahl@noaa.gov} \), Ed Cook (drdendro@ldeo.columbia.edu) or Eduardo Zorita (Eduardo.zorite@gkss.de) for more information.

Group Website & Database: Not yet developed.

LOTRED – S. AMERICA:

Steering Committee:
Ricardo Villalba, Martin Grosjean.

Meeting:
LOTRED-SA received PAGES support to hold their second regional workshop.
Date: 26 – 29 Oct 2010, Valdivia, Chile
Outline: This meeting will enable the review of current knowledge and available data sets, discussion of proxy data interpretation, and investigation into calibration and quantification techniques of proxy data. The long-term goal is to continue working towards a comprehensive view of regional climate variability and environmental change during the past few millennia, and to produce a gridded data set of climate variables from high-resolution multi-proxy time series.
Meeting website: www.pages-igbp.org/science/lotred-sa/

Publications:
This working group recently published the special issue \textit{Long-term multi-proxy climate reconstructions and dynamics in South America}, resulting from the first LOTRED-SA workshop in 2006. See www.pages.unibe.ch/cgi-bin/WebObjects/products.woa/wa/product?id=324 for more information on this publication.

Group Website & Database:
www.pages-igbp.org/science/lotred-sa/about
5) DELIMITATION OF STUDY AREAS

A decision will be made at the 2k Network 2011 meeting on the delimitation or geographical range of the study areas of all 2k regional Working Groups. However, it is important to emphasize that each group should think about including surrounding ocean records from a defined area. We know that data are sparse for these areas. On the other hand, ocean areas greatly influence the structure and dynamics of neighboring continents (e.g., formation and distribution of precipitation).

6) INTEGRATION OF MODEL RESULTS

The central focus of the PAGES 2k initiative lies on the spatio-temporal reconstruction and dynamical interpretation of the climate of the last 2 ka, based on information from natural archives, documentary sources and instrumental measurements. Nevertheless, data-model comparison is also an important element of our work. Cross Cutting Theme 3 of PAGES deals with modeling aspects (leaders: Bette Otto-Bliesner and Michael Schulz), and within the internationally coordinated CMIP5 and PMIP3 projects two experiments are planned that are of particular interest for the PAGES 2k initiative:
a) Last Millennium simulation for 850-1850 AD.
b) Historical simulation from 1859-2005 AD (a CORE long-term simulation in CMIP5).


7) DATA MANAGEMENT AND STORAGE

Cross Cutting Theme 4 of PAGES deals with data management aspects. This will also be an important component of the 2k initiative. Each regional group is offered a regional metadatabase on their website provided by PAGES. These Metadatabase are intended to assist the dataset collection during the project phase. For the synthesis phase, it should be a goal of each regional group to have the relevant paleodata submitted to NOAA’s National Climatic Data Center, which hosts an archive specifically of the past 2+ millennia data.

An overview of this activity was recently published: