DIVERSITAS
is an international, non-governmental programme with a dual mission:

to promote an integrative biodiversity science, linking biological, ecological and social disciplines in an effort to produce socially relevant new knowledge; and

to provide the scientific basis for the conservation and sustainable use of biodiversity.

© DIVERSITAS 2014
ISSN: 1813-7105
ISBN: 978-2-918797-04-03

Design: Maro Haas, Les Lilas, France
Printed by STIPA on 100% recycled paper.

Photo credits:

CONTENT

FOREWORD
3    From the Chair and the Executive Director

SECTION 1 - Key developments
5    Future Earth
7    DIVERSITAS transitions into Future Earth
9    DIVERSITAS celebration

SECTION 2 - Research Projects
11   Implementing the framework for integrated biodiversity science
12   International Project Offices’ contacts
14   bioGENESIS
15   bioDISCOVERY
16   ecoSERVICES (including FW-BD, agroBD)
18   ecoHEALTH
20   Global Mountain Biodiversity Assessment (GMBA)
21   Biodiversity and urbanisation (bioSUSTAINABILITY)
22   Global Water System Project (GWSP)
23   Global Environmental Change and Human Health (GECHH)
23   Global Carbon Project (GCP)
24   Climate Change, Agriculture and Food Security (CCAFS)

SECTION 3 - Observations
25   Group on Earth Observations-Biodiversity Observation Network (GEO BON)

SECTION 4 - Assessment
27   DIVERSITAS at the interface between science and policy making: contributing to assessments
28   The Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES)
   - Global Biodiversity Outlook 4

SECTION 5 - Policy
31   DIVERSITAS at the interface between science and policy making: contributing to the work of Conventions
   - Convention on Biological Diversity (CBD)
   - Convention on Climate Change (UNFCCC)
   - Sustainable Development Goals (SDGs)

SECTION 6 - Publications and Events
35   List of publications
42   List of events

SECTION 7 - National Committees
45   Expanding network strengthens international framework

47   People: Committees and Secretariat
50   Financial Summary
51   Acknowledgements
52   Acronyms
Getting involved...
The 2013-14 period has again been a rich one for DIVERSITAS. In addition to overseeing the projects activities, fulfilling our science-policy mandates, contributing to the development of the early stages of Future Earth, DIVERSITAS was strongly committed to design and oversee a successful transition of its activities to Future Earth.

**Contribution to the first IPBES programme of work**

The second Plenary of IPBES (December 2013, Antalya, Turkey) approved the IPBES conceptual framework and the IPBES programme of work for the 2014-2018 period. Responding to its mandate, IPBES will carry regional and global assessments, and already started some thematic (pollination and food production) and methodological (different conceptualisation of values of biodiversity, and scenarios analyses and modelling) assessments. In addition, and in contrast to IPCC, the IPBES Plenary appointed three task forces, which will be responsible for advancing the generation of knowledge (Knowledge and Data) and capacity building functions of IPBES, and addressing issues related to working with indigenous and local knowledge systems, during the whole period of the programme of work.

Following calls for experts, it was gratifying for DIVERSITAS that over half of the nominated experts from its community were selected to participate in the working groups appointed to implement this programme of work. Participation of the DIVERSITAS community cut across all the IPBES deliverables. In addition, a dedicated support to the task force on Knowledge and Data was offered by the DIVERSITAS network.

**DIVERSITAS contributions to the IPBES process, especially as a scientific arm to its programme of work, will continue through its projects (bioDISCOVERY, bioGENESIS, ecoHEALTH, ecoSERVICES, GMBA), the newly funded Future Earth Fast track initiative on IPBES, and also under the auspices of ICSU.**

**Launch of the 4th edition of the Global Biodiversity Outlook**

The 4th edition of the Global Biodiversity Outlook (GBO-4) is a landmark document to monitor progress towards meeting the 20 Aichi Biodiversity Targets, and review potential actions to accelerate this progress. GBO-4 also provides recommendations to achieve the 2050 vision of the Convention to Biological Diversity, and to the importance of biodiversity and ecosystem services for sustainable development. As such it is a key input to the on-going discussions on the UN post 2015 process developing Sustainable Development Goals.
DIVERSITAS, with its partners, led the technical review of the Aichi targets, the development of scenarios and models to assess future trends, and the publication of these results in the CBD Technical Series 78 “Progress towards the Aichi biodiversity targets: an assessment of biodiversity trends, policy scenarios and key actions”. This technical document and the GBO-4 were both released with great success at COP12 (October 2014, Pyeongchang, Republic of Korea). The technical document was presented and discussed during side events, at the plenary and at the high level segment.

**DIVERSITAS entering into its third phase with Future Earth**

DIVERSITAS has continued to support the development of Future Earth on different fronts, including contribution to the development of Future Earth strategic research priorities, to the governing processes (particulary in relation to the core projects governance), to shaping the science-policy interface and providing inputs to the operationalization of Future Earth Secretariat.

In parallel, the DIVERSITAS community has been working to transition all activities to Future Earth. The DIVERSITAS portfolio of its projects was restructured to reflect the latest research advances and the priority areas within Future Earth. The DIVERSITAS projects are also taking leadership role in the DIVERSITAS science-policy activities, which include contributions to policy processes and fora (e.g. SDGs development, CBD), to assessment mechanisms (e.g. IPBES, GBO), and observation mechanisms (e.g. GEO BON, GBIF). In addition, the coordination and facilitation role played by the DIVERSITAS Scientific Committee and the Secretariat is transferred to Future Earth and its partners from the Alliance for Global Sustainability.

In line with this transition, DIVERSITAS gathered its community on 30 September 2014 to celebrate its 23 years of activity and its transition to a new era of more integration in sustainability science under Future Earth. The celebration included a hundred guests representing present and past members of the DIVERSITAS community, sampling the much larger DIVERSITAS community of circa 5,000 members. In a very positive and friendly atmosphere it showcased the achievements and legacy of DIVERSITAS and highlighted new opportunities for biodiversity science brought by Future Earth. The celebration was also an opportunity to express gratitude to many staff, project and programme members, partners and collaborators for their hard work and good spirit over many years.

We would like to invite the overall DIVERSITAS community to join the Future Earth endeavor in their capacity as experts in the fields of biodiversity and ecosystem services representing a broad range of disciplines (e.g. taxonomy, ecosystem functioning, economy, anthropology) and key societal areas (e.g. health, food, water), or as representatives of the national networks (i.e. National Committees), funders of our activities, or partners representing a broad range of stakeholders (e.g. scientific organisations, policy fora, conservation NGOs).

DIVERSITAS is particularly grateful to its large community, which has generated many great achievements that were highlighted during the DIVERSITAS celebration in Seville. The greatest challenge and success has been to establish a very well-recognised, diverse and enthusiastic scientific network on biodiversity and ecosystem services standing ready to address new challenges. Over the years, this network has been able to make step changes in conducting biodiversity research and in building new partnerships with other stakeholder and policy communities. We fully trust it will continue in the future.

DIVERSITAS is more than a sum of its parts; it is a large, diverse, committed, enthusiastic, friendly and fun network, with which it has been a great privilege to work.

**Georgina Mace,**
Chair Scientific Committee of DIVERSITAS

**Anne-Hélène Prieur-Richard,**
Executive Director, DIVERSITAS
Future Earth is a 10-year international research programme launched in June 2012, at the UN Conference on Sustainable Development (Rio+20), that will provide the knowledge and support to accelerate our transformations to a sustainable world. Bringing together and in partnership with existing Global Environmental Change programmes (DIVERSITAS, IGBP, IHDP and WCRP), Future Earth will be an international hub to coordinate new, interdisciplinary approaches to research. It will also be a platform for international engagement to ensure that knowledge is generated in partnership with society and users of science. It is open to scientists of all disciplines, natural and social, as well as engineering, the humanities and law. Future Earth is sponsored by the Science and Technology Alliance for Global Sustainability (the Alliance), comprising the International Council for Science (ICSU), the International Social Science Council (ISSC), the Belmont Forum of funding agencies, the United Nations Educational, Scientific, and Cultural Organisation (UNESCO), the United Nations Environment Programme (UNEP), the United Nations University (UNU), and the World Meteorological Organisation as an observer.

I- Recent developments (2013-14)

Future Earth Engagement Committee

The interim Engagement Committee and Engagement Committee were appointed respectively in October 2013 and in November 2014 (see pages 48-49). The Engagement Committee was appointed by the Alliance, and a further three members will be announced by the Alliance shortly.

Establishment of the Executive Secretariat

The selection of a consortium to host the Future Earth Executive Secretariat was announced in July 2014 by the Alliance. The consortium comprises five global hubs located in Canada (Montreal), France (Paris), Japan (Tokyo), Sweden (Stockholm) and the United States (Boulder, Colorado). These hubs will function as a single entity, and are complemented by a set of regional hubs which today cover the Middle East and North Africa, Latin America, Europe and Asia. These regional structures are also being developed to ensure broader geographical representation and global diversity in the running of Future Earth.
Publication of the Future Earth Strategic Research Agenda and Future Earth 2025 Vision

The vision of Future Earth is for people to thrive in an equitable and sustainable world. A document outlining an ambitious, holistic framework for achieving this vision was published in November 2014, and followed by the publication of the Future Earth Strategic Research Agenda in December 2014. The latter document, which has been informed by extensive consultation with scientists and societal partners, sets out priorities for research that will accelerate transitions to sustainable development.

First funded activities: Fast Track Initiatives and Clusters

In August 2014, eight new Fast Track Initiatives and Cluster Activities were awarded a total of US$ 850,400, fully supported by the US National Science Foundation. The initiatives encourage transdisciplinary collaboration on some of today’s most pressing global environmental challenges.

Stakeholder forum

Organised by the Alliance, the 2014 Future Earth Forum took place on the 24 September 2014 at the State University of New York Global Center in New York City on the heels of the UN Climate Summit, and brought together thought-leaders from the business, media, policy and research communities to help co-design the Future Earth research agenda.

Future Earth will be organised around three research themes:

- Dynamic Planet
  Observing, explaining, understanding, and projecting earth, environmental, and societal system trends, drivers and processes and their interactions as well as anticipating global thresholds and risks.

- Global Sustainable Development
  Developing knowledge to address the pressing needs of humanity for sustainable, secure and fair stewardship of food, water, biodiversity, energy, materials and other ecosystem functions and services.

- Transformation towards Sustainability
  Understanding transformation processes and options, assessing how these relate to human values and behaviour, emerging technologies and social and economic development pathways, and evaluating strategies for governing and managing the global environment across sectors and scales.

II. Future Earth science in a nutshell

The global sustainability challenges driving interdisciplinary science in Future Earth are:

1) Delivering water, energy, and food for all
2) Decoupling carbon emissions from economic growth
3) Safeguarding land, freshwater and marine natural assets
I- DIVERSITAS vision for Future Earth

DIVERSITAS is in full support of Future Earth as a framework for integrated global environmental change science for sustainability. DIVERSITAS worked with Future Earth to ensure the appropriate representation of biodiversity, ecosystem functioning, and ecosystem services in its scientific portfolio. Genetic diversity, along with evolutionary and ecological processes, provides the only means whereby biotic components of ecosystems can adapt to the rapidly changing environment. The interplay between ecological systems and human behaviour, values, and institutions must also be better addressed in order to have an impact on the underlying drivers of biodiversity changes. It is therefore key to study biodiversity as part of an integrated social–ecological system as Future Earth proposes to do.

The vision outlined above is embedded in the DIVERSITAS vision 2012-2020 (Larigauderie et al. 2012) and the 2050 vision of the Convention on Biological Diversity:

“By 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people.”

II- Transitioning to Future Earth

The SC-DIVERSITAS oversaw the transition process of its projects and science-policy activities during the period mid 2013-2014.

The DIVERSITAS project portfolio was reviewed and restructured in the context of the transition to Future Earth:

- The activities of agroBIODIVERSITY, freshwaterBIODIVERSITY, and bioSUSTAINABILITY (except the urban-related activities) were merged into bioGENESIS, bioDISCOVERY and ecoSERVICES.
- bioGENESIS, bioDISCOVERY, ecoSERVICES, ecoHEALTH, and GMBA are transitioning towards Future Earth. In 2014, each project developed a project statement and submitted it, together with an MoU, to Future Earth.
- Some discussions are on-going to merge the urban-related activities of bioSUSTAINABILITY with other urban-related activities of the Global Environmental Change programmes. This process will be facilitated by the newly funded Future Earth Cluster Activity on urbanisation.

At the closure of DIVERSITAS (31 December 2014) and following up the signature of the Future Earth MoU, the administration of these DIVERSITAS
projects is transferred to the Future Earth Secretariat.

The DIVERSITAS projects are taking leadership roles in the DIVERSITAS science-policy activities, which include contributions to policy processes and fora (e.g. SDGs development, CBD), to assessment mechanisms (e.g. IPBES, GBO), observation mechanisms (e.g. GEO BON, GBIF). In addition, the coordination and facilitation role played by the DIVERSITAS Scientific Committee and Secretariat is transferred to Future Earth and partners of the Alliance for Global Sustainability.

III- DIVERSITAS contribution to Future Earth during mid 2013 and 2014

- Contribution of the DIVERSITAS projects to shaping the Future Earth Strategic Research Agenda published in December 2014.

- Participation of the DIVERSITAS projects Science Officers and Secretariat to the work of the Future Earth Task Forces, thus helping the Future Earth secretariat to shape its work e.g. on the project governance, science-policy interface, and observation.

- Presentation and promotion of Future Earth at science-policy events such as the participation of Anne-Hélène Prieur-Richard in a plenary panel at the Convention on Biological DIVERSITAS SBSTTA17, or her participation in the ICSU delegation at IPBES-2 representing Future Earth.

- Mobilisation of the DIVERSITAS stakeholder community to respond to the call for nomination for the Future Earth Engagement Committee.

- Successful response to the Future Earth call for Fast Track Initiatives and Cluster Activities with, among the 8 selected proposals, 3 activities led by DIVERSITAS projects, and their participation in 3 others.

- Second meeting of the Global Environmental Change projects, 20-22 January 2014 in Washington DC, USA, in which all DIVERSITAS projects Science Officers and Scientific Committee Chairs or representatives took part.
Gathering in Seville, Spain, to celebrate past, present and future

On 30th Septembre 2014, DIVERSITAS celebrated its 23 years of existence and its transition to a new era of more integration in sustainability science materialised into Future Earth. The Celebration was organised back-to-back with annual Scientific Committee meetings of DIVERSITAS Core Projects. It convened about eighty guests and provided a unique opportunity for interactions between current and past Scientific Committee members and invitees sampling the much larger DIVERSITAS community of circa 5,000 members.

The conference programme was lively and convivial, inclusive and diverse in topics and presenters/panellists to reflect the richness of the DIVERSITAS’ experience in its research work, its science-policy engagement, and its “fun” way of working together. The opening presentation of Harold Mooney and Anne-Hélène Prieur-Richard set the tone for the day by painting a historical fresco with witty photos and comments. These players

**Presenters and Panellists**

- Elena Bennett
- Frans Berkhout
- George Brown
- Wolfgang Cramer
- Peter Daszak
- Sandra Díaz
- Michael Donoghue
- David Dudgeon
- Felix Forest
- Jean-François Guégan
- Walter Jetz
- Jens Kattge
- Cornelia Krug
- Anne Larigauderie
- Sandra Lavorel
- Philippe Le Prestre
- Georgina Mace
- Catherine Machalaba
- Unai Pascual
- Belinda Reyers
- Jon Samseth
- José Sarukhán Kermez
- Peter Johan Schei
- Robert Scholes
- Eva Spehn
- Billie L. Turner II
- Sheila Vergara
- Wendy Watson-Wright
- Aline van der Werf
- Steven Wilson
represented different aspects and roles of DIVERSITAS such as chairmanship of the Scientific Community during DIVERSITAS phase 1 (1991-2001) and phase 2 (2002-2014), members of the core projects’ Scientific Committees, leaders in building the biodiversity science-policy interface, and Di Castri fellows.

Communication and Youth Reporter Initiative

With the support of the Future Earth interim secretariat, a special effort was dedicated to providing a live coverage of the Celebration for its community via Twitter (#diversitas) and photos. In particular, DIVERSITAS implemented a Youth Reporter Initiative to relay the lessons that can be learned from the DIVERSITAS experience to the broader DIVERSITAS and Future Earth community including the next generation of biodiversity scientists and practitioners. Vivian Lam, Jasper Montana, Meghan O’Connell and Carly Ziter were the four young scientists selected on an open call who attended the conference and successfully played this journalistic role. They produced a set of filmed interviews featuring themselves and some of the participants. They also published blog stories in which they reflected on lessons they could learn and share from the Celebration:

- **Productive research networks and the legacy of DIVERSITAS** – J Montana reflects on how research initiatives often find added value in the networks of people and processes they create;

- **Beyond DIVERSITAS – the future legacy of a new generation of biodiversity scientists** – C Ziter questions the role the young biodiversity scientists will play in solving the biodiversity crisis;

- **Celebrating opportunity** – M O’Connell finds out how key players in DIVERSITAS initially got involved in its network and how it transformed their careers; and highlights the importance of a holistic and inclusive networking approach for sustainability science; and

- **“Don’t do boring science!” Advice for early career scientists from the DIVERSITAS community** – V Lam provides 25 tips for young scientists to pep up their early career with advices from the DIVERSITAS community.

These stories are available on the Future Earth Blog ([www.futureearth.org/](http://www.futureearth.org/)).
DIVERSITAS Core Projects cover a broad range of topics and important aspects of biodiversity and sustainability science. Some address cross-ecosystem research priorities, some focus on specific ecosystems, and some are developed in collaboration with the other Global Environmental Change programmes. Individually, these Core Projects assemble the expertise required—from both natural and social disciplines—to address specific aspects of biodiversity and sustainability science. Collectively, they ensure the continued development of a truly international and integrated approach.

- **bioGENESIS** aims at facilitating the development of new strategies and tools for documenting biodiversity, to understand the dynamics of diversification, and to make use of evolutionary biology to understand anthropogenic impacts

- **bioDISCOVERY** focuses on developing a scientific framework to investigate the current extent of biodiversity, monitor its changes and predict its future changes

- **ecoSERVICES** explores the link between biodiversity and the ecosystem functions and services that support human well-being and seeks to determine human responses to changes in ecosystem services

- **Global Mountain Biodiversity Assessment (GMBA)** explores and explains the great biological richness of the mountains of the world

- **ecoHEALTH** provides a conceptual framework to carry out interdisciplinary research on the links between biodiversity, emerging infectious diseases, and other global environmental change issues related to health

- **Global Water System Project (GWSP)** aims at understanding the biogeochemical water cycle and explores how humans impacts it

- **Global Environmental Change and Human Health (GECHH)** explores the multi-faceted and complex linkages between global environmental change and human health

- **Global Carbon Project (GCP)** aims at developing a complete picture of the global carbon cycle, including both its biophysical and human dimensions, together with the interactions and feedbacks between them

- **Climate Change, Agriculture and Food Security (CCAFS)** addresses the increasing challenge of global warming and declining food security on agricultural practices, policies and measures
**International Project Offices implement DIVERSITAS Projects**

Projects get implemented by International Project Offices (IPOs). IPOs represent an important mean of strengthening DIVERSITAS' presence throughout the world and building links to existing research institutes and programmes.

### CO-CHAIRS AND PROGRAMME OFFICERS

<table>
<thead>
<tr>
<th>bioGENESIS</th>
<th><a href="http://www.biogenesis-diversitas.org">www.biogenesis-diversitas.org</a></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Co-chairs</strong></td>
<td></td>
</tr>
<tr>
<td>Andrew Hendry</td>
<td>McGill University, Canada</td>
</tr>
<tr>
<td>Felix Forest</td>
<td>Royal Botanic Gardens, Kew, UK</td>
</tr>
<tr>
<td><strong>Programme Officer</strong></td>
<td>Melina Sakiyama</td>
</tr>
<tr>
<td>email: <a href="mailto:melina@diversitas-international.org">melina@diversitas-international.org</a></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>bioDISCOVERY</th>
<th><a href="http://www.diversitas-international.org/biodiscovery">www.diversitas-international.org/biodiscovery</a></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chair</strong></td>
<td>Paul Leadley</td>
</tr>
<tr>
<td>University Paris-Sud 11, Orsay, France</td>
<td></td>
</tr>
<tr>
<td><strong>Programme Officer</strong></td>
<td>Cornelia Krug</td>
</tr>
<tr>
<td>email: <a href="mailto:cornelia@diversitas-international.org">cornelia@diversitas-international.org</a></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ecoSERVICES</th>
<th><a href="http://www.diversitas-international.org/ecoservices">www.diversitas-international.org/ecoservices</a></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Co-chairs</strong></td>
<td></td>
</tr>
<tr>
<td>Wolfgang Cramer</td>
<td>Institut Méditerranéen de Biodiversité et d'Ecologie marine et continentale (IMBE), Université d'Aix-Marseille, France</td>
</tr>
<tr>
<td>Elena Bennett</td>
<td>McGill University, Canada</td>
</tr>
<tr>
<td><strong>Programme Officer</strong></td>
<td>Karine Payet-Lebourges</td>
</tr>
<tr>
<td>email: <a href="mailto:karine@diversitas-international.org">karine@diversitas-international.org</a></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>bioSUSTAINABILITY</th>
<th><a href="http://www.diversitas-international.org/biosustainability">www.diversitas-international.org/biosustainability</a></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chairs</strong></td>
<td>Thomas Elmqvist</td>
</tr>
<tr>
<td>University of Stockholm, Sweden</td>
<td></td>
</tr>
<tr>
<td><strong>Programme Officer</strong></td>
<td>Maria Schewenius</td>
</tr>
<tr>
<td>email: <a href="mailto:maria.schewenius@stockholmresilience.su.se">maria.schewenius@stockholmresilience.su.se</a></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Global Mountain Biodiversity Assessment</th>
<th><a href="http://gmba.unibas.ch">http://gmba.unibas.ch</a></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chair</strong></td>
<td>Christian Körner</td>
</tr>
<tr>
<td>University of Basel, Switzerland</td>
<td></td>
</tr>
<tr>
<td><strong>Executive Director</strong></td>
<td>Eva Spehn</td>
</tr>
<tr>
<td>email: <a href="mailto:gmba@unibas.ch">gmba@unibas.ch</a></td>
<td></td>
</tr>
<tr>
<td>CO-CHAIRS AND PROGRAMME OFFICERS</td>
<td>CONTACT</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td><strong>ecoHEALTH</strong></td>
<td><a href="http://www.diversitas-international.org/ecohealth">www.diversitas-international.org/ecohealth</a></td>
</tr>
<tr>
<td>Chair</td>
<td><strong>ecoHEALTH Secretariat</strong></td>
</tr>
<tr>
<td>Peter Daszak</td>
<td>EcoHealth Alliance</td>
</tr>
<tr>
<td>EcoHealth Alliance, New York, USA</td>
<td>460 West 34th Street, 17th Floor</td>
</tr>
<tr>
<td>New York, NY 10001 – USA</td>
<td>Tel: +1 212 380 4472</td>
</tr>
<tr>
<td>Contact</td>
<td>Email: <a href="mailto:machalaba@ecohealthalliance.org">machalaba@ecohealthalliance.org</a></td>
</tr>
<tr>
<td>Catherine Machalaba</td>
<td><strong>Global Water System Project</strong></td>
</tr>
<tr>
<td></td>
<td><a href="http://www.gwsp.org">www.gwsp.org</a></td>
</tr>
<tr>
<td>Co-chairs</td>
<td><strong>Global Water System Project</strong></td>
</tr>
<tr>
<td>Claudia Pahl-Wostl</td>
<td>International Project Office</td>
</tr>
<tr>
<td>University of Osnabrueck, Germany</td>
<td>c/o Center for Development Research (ZEF)</td>
</tr>
<tr>
<td>Charles Vörösmarty</td>
<td>Walter-Flex-Str. 3</td>
</tr>
<tr>
<td>CUNY Environmental CrossRoads Initiative, USA</td>
<td>53113 Bonn – Germany</td>
</tr>
<tr>
<td>Executive Officer</td>
<td>Tel: +49 228 73 6188</td>
</tr>
<tr>
<td>Anik Bhaduri, University of Bonn, Germany</td>
<td>Email: <a href="mailto:gwsp.ipo@uni-bonn.de">gwsp.ipo@uni-bonn.de</a></td>
</tr>
<tr>
<td><strong>Global Environmental Change and Human Health</strong></td>
<td><a href="http://www.gechh.unu.edu">www.gechh.unu.edu</a></td>
</tr>
<tr>
<td>Chair</td>
<td><strong>Global Environmental Change and Human Health</strong></td>
</tr>
<tr>
<td>Mark Rosenberg</td>
<td>Department of Geography</td>
</tr>
<tr>
<td>Queen’s University, Kingston, Canada</td>
<td>Queen’s University Kingston</td>
</tr>
<tr>
<td></td>
<td>Kingston K7L 3N6, Ontario – Canada</td>
</tr>
<tr>
<td></td>
<td>Tel: +1 6135336122</td>
</tr>
<tr>
<td></td>
<td>Email: <a href="mailto:rosenber@queensu.ca">rosenber@queensu.ca</a></td>
</tr>
<tr>
<td><strong>Global Carbon Project</strong></td>
<td><a href="http://www.globalcarbonproject.org">www.globalcarbonproject.org</a></td>
</tr>
<tr>
<td>Co-chairs</td>
<td><strong>Global Carbon Project</strong></td>
</tr>
<tr>
<td>Nebosja Nakicenovic, International Institute for Applied Systems Analysis, Austria</td>
<td>International Project Office</td>
</tr>
<tr>
<td>Rob Jackson</td>
<td>CSIRO Marine and Atmospheric Research</td>
</tr>
<tr>
<td>School of Earth Sciences, Stanford University, USA</td>
<td>GPO Box 3023</td>
</tr>
<tr>
<td></td>
<td>Canberra, ACT 2601 – Australia</td>
</tr>
<tr>
<td>Executive Directors</td>
<td>Tel: +61 2 6246 5631</td>
</tr>
<tr>
<td>Pep Canadell, CSIRO Oceans and Atmosphere Flagship, Australia</td>
<td>E-mails: <a href="mailto:pep.canadell@csiro.au">pep.canadell@csiro.au</a></td>
</tr>
<tr>
<td>Ayyoob Sharifi, NIES, Japan</td>
<td><a href="mailto:Ayyoob.sharifi@nies.go.jp">Ayyoob.sharifi@nies.go.jp</a></td>
</tr>
<tr>
<td><strong>Climate Change, Agriculture and Food Security</strong></td>
<td><a href="http://ccafs.cgiar.org/">http://ccafs.cgiar.org/</a></td>
</tr>
<tr>
<td>Chair</td>
<td><strong>Climate Change, Agriculture and Food Security</strong></td>
</tr>
<tr>
<td>Thomas Rosswall, France</td>
<td>Coordinating Unit – University of Copenhagen</td>
</tr>
<tr>
<td></td>
<td>Faculty of Science</td>
</tr>
<tr>
<td></td>
<td>Department of Plant and Environmental Sciences</td>
</tr>
<tr>
<td></td>
<td>Rolighedsvej 21</td>
</tr>
<tr>
<td></td>
<td>DK-1958 Frederiksberg C – Denmark</td>
</tr>
<tr>
<td>Program Director</td>
<td>Tel: +45 35331046</td>
</tr>
<tr>
<td>Bruce Campbell, CCAFS Coordinating Unit, University of Copenhagen, Denmark</td>
<td>Email: <a href="mailto:ccafs@cgiar.org">ccafs@cgiar.org</a></td>
</tr>
</tbody>
</table>
bioGENESIS
Providing an evolutionary framework for biodiversity science

Co-chairs: A Hendry, McGill University, Canada; F Forest, Royal Botanic Gardens, Kew, UK
www.biogenesis-diversitas.org

The primary aim of bioGENESIS is to catalyse the international communication and integrated research that are necessary to bring evolutionary approaches to bear on pressing issues related to biodiversity and human well-being. bioGENESIS will continue providing an evolutionary framework in a broader context of sustainability under Future Earth, and as such is participating in several of its Fast Track Initiatives.

GEO Biodiversity Observation Network (GEO BON)
GEO BON Working Group 1 on “Genetic/phylogenetic diversity”, co-chaired by D Faith and T Yahara (see www.biogenesis-diversitas.org/observation) is currently contributing to the Genetic Diversity Report that will be released by GEO BON in 2015.

GEO BON, through key partnerships, promotes observations on genetic diversity not only on crop plants and other economically important species, but also on wild genetic diversity. Through the use of new technologies, and new modeling approaches linked to global databases, GEO BON activities will draw on intensive studies of important species, including rapidly declining species, rapidly increasing species (including invasive species), keystone species, flagship species and commercially important species. This data will be compiled and contribute to the Genetic Diversity Report.

Workshop on “Phylogenetics, Extinction Risks and Conservation”
The workshop was hosted by The Royal Society in March 2014 and was organised by Prof. Mark Chase FRS and bioGENESIS members Felix Forest, Dan Faith, Keith Crandall. The much-needed integration of phylogenetics and assessments of extinction risks to provide additional information for conservation planning actions has been advocated for some time and different methodologies have been proposed to integrate extinction risk and phylogenetic information. The workshop offered a platform to present the available methods and encourage discussions about the merits and disadvantages of each, as well as presentation of yet newer approaches. A special issue of the Royal Society’s Philosophical Transactions on Phylogenetics, Extinction Risks and Conservation will be edited by Felix Forest, Mark Chase, Dan Faith and Keith Crandall and is scheduled to be published in January 2015.

Amazonian Biota
This on-going project, granted in 2012 by NSF and FAPESP, and led by Lucia Lohman (Brazil) and Joel Cracraft (USA) aims at understanding the history of the Amazonia by characterizing the spatial structure of Amazonian biodiversity. This project held its second symposium in Manaus, Brazil (May 2014) and has focussed in documenting the progress done on Amazonian environmental history, taxonomy, distributions and spatial patterns of diversity, phylogeography and phylogenetic history of Amazonian organisms and methods of Amazonian biogeography. The project has already published several papers documenting preliminary results (see page 35).
bioDISCOVERY
Assessing, monitoring and predicting biodiversity change

Chair: P Leadley, University of Paris-Sud 11, Orsay, France
www.diversitas-international.org/biodiscovery

The aim of bioDISCOVERY is to stimulate the basic research necessary to understand the mechanisms underlying biodiversity change and related ecosystem services change, and to provide input into policy to promote the conservation and sustainable use of biodiversity.

Contribution to the 4th Global Biodiversity Outlook (GBO-4)
bioDISCOVERY, together with its partners UNEP-WCMC, PBL, UBC Fisheries and iDIV, led the assessments of scenarios of biodiversity change to determine the progress towards the 2020 Aichi Targets and 2050 Millennium Development Goals. See the more detailed report page 30.

Eco-evolutionary approaches to climate change
The goal of this initiative is to bridge the gap between evolutionary and functional ecology in order to improve models of species distribution and abundance change under environmental change. The initiative move from more theoretical discussions and considerations to project-based work, focussed around the model “RangeShifter”, developed by Justin Travis group (Aberdeen University, UK), which incorporates both population dynamics and adaptive capability of a species in predicting range shifts. In the October 2013 meeting, the group identified a number of case studies on which to test the model. The September 2014 meeting was dedicated to adapting the model for each case studies.

Global Plant Trait Initiative (TRY)
Nearly 100 scientists attended the 5th workshop of the Global Plant Trait Initiative (TRY), held in Leipzig in September 2013. Aim of the workshop was to examine the recent developments of TRY to initiate and support cooperation on core research topics, in particular the access to data stored in the trait data base. See www.try-db.org for more information.

Harmonising Global Biodiversity Modelling (Harmbio)
The main aim of this EU COST Action ES1101 is the harmonisation of current models and datasets of terrestrial, freshwater and marine biodiversity to improve the reliability of future projections of biodiversity change under various policy options, thus informing environmental decision making. The working groups focus on standardisation and harmonisation of biodiversity data sets, indicators of biodiversity change, model development and model inter comparison. An all-Working Group meeting was held in April 2014 (Leipzig, Germany) to assess the progress of Harmbio, and to charter a way forward. One of the follow up has been a workshop organised in May 2014 (Chania, Crete) aiming at bringing together experts in biodiversity and environmental monitoring and information systems development to discuss environmental information systems’ design guidelines, experiences, expectations and requirements elicitation regarding the development of a conceptual model for a future HarmBio Decision Support System (DSS). Visit www.harmbio.eu for more information.

Transitioning into Future Earth
bioDISCOVERY will transition to Future Earth at the end of 2014. The project continues its focus on monitoring, modelling and assessment, and is involved in these regards in a number of Future Earth activities. bioDISCOVERY leads the cluster “Scientific support for IPBES knowledge generation”, and is a partner in the GMB-lead cluster “Global biodiversity monitoring, prediction and reporting” and the cluster “Linking earth system and socio-economic models to predict and manage changes in land use and biodiversity” led by AIMES. New members have been appointed to the steering committee to ensure greater representation of the freshwater and marine communities.
ecoSERVICES
Linking biodiversity – including ecosystem functioning – ecosystem services and human well-being

Chairs: E Bennett, McGill University, Canada (since 1st January 2014), and W Cramer, Institut Méditerranéen de Biodiversité et d’Ecologie marine et continentale (IMBE), France (since 1st January 2013)
www.diversitas-international.org/ecoservices

Increased interdisciplinary and cross-system integration:

ecoSERVICES
+ agroBIOBIOdiversity
+ freshwaterBIOBIOdiversity
+ bioSUSTAINABILITY (except urban)
≡ new ecoSERVICES

ecoSERVICES integrates all combined aspects of the aforementioned projects except from the urban focus of bioSUSTAINABILITY that will become a new project of Future Earth, i.e. urbanEARTH. The rationale for this merging is to accomplish greater integration across social-ecological systems in marine, freshwater and terrestrial realms.

On 31st December 2013, DIVERSITAS thanked the respective scientific committees of agroBIOBIOdiversity, freshwaterBIOBIOdiversity and bioSUSTAINABILITY for a last time; meanwhile, the new members of ecoSERVICES were appointed with the objective to meet the requirements in scientific profiles that would allow the new SC-ecoSERVICES members to collectively fulfil the challenge of greater interdisciplinary and cross-system integration. A special attention was made to have a balance representativeness of social and natural experts as well as experts working on freshwater and marine ecosystems. This challenge is also reflected in the new scientific strategy of ecoSERVICES.

Setting a 5-year plan on ecosystem service science

The new scientific strategy of ecoSERVICES was designed at a workshop held on 10-12 November 2013 in Paris, France, to identify the most immediate challenges that impede or constrain progression in the capacity of ecosystem service science to advise next generation of policies and management actions. The workshop was followed by a drafting process led by the SC-ecoSERVICES.

The new strategy focuses on three interconnected research challenges:

盔 How, when and where are ecosystem services produced by social-ecological systems?
盔 Who are the beneficiaries of ecosystem services; where and when do they benefit?
盔 What makes good governing institutions and processes for ecosystem services?

These three questions aim at framing the full range of relationships from biodiversity through ecosystem functions to human well-being.
The new scientific strategy of ecoSERVICES will be published in COSUST-Current Opinion in Environmental Sustainability as an Invited Submission in the journal Open Issue of 2015. It will be implemented through new research projects, continued support of science-policy work (in particular CBD, IPBES and FAO), and partnerships with other networks on ecosystem services under the Future Earth umbrella.

**Implementing the Future Earth agenda**
ecoSERVICES leads one and contributes to three of the eight initiatives launched by Future Earth in September 2014 to accelerate global sustainable development.

**Bright Spots: Seeds of a Good Anthropocene** is the Future Earth Fast Track Initiative led by ecoSERVICES that will solicit, explore, and develop a suite of alternative, plausible visions of “Good Anthropocenes” – positive visions of futures that are socially and ecologically desirable, equitable, and sustainable – and identify and analyse ‘bright spots’ or real places that demonstrate one or more elements of a positive future that might serve as seeds of a Good Anthropocene. The project aims at redressing the bias towards the negative visions of the future that may inhibit humanity’s ability to move towards a positive future for the Earth and itself. It will be implemented over the course of 2014-2016.

In addition to working on Bright Spots, ecoSERVICES will contribute to Scientific support for IPBES knowledge generation led by bioDISCOVERY, Global biodiversity monitoring, prediction and reporting led by GMBA, and Linking earth system and socio-economic models to predict and manage changes in land use and biodiversity led by AIMES.

**Work on agrobiodiversity and food security**
ecoSERVICES is involved in EcoFINDERS (Ecological Function and Biodiversity Indicators in European Soils), in particular its work package 5 on Valuation of Soil Ecosystem Services, which is a FP7 project on soil biodiversity and ecosystem services. EcoFINDERS analyses the crucial role of soil biodiversity for the proper functioning of soil ecosystems in order to sustain ecosystem services such as food and fibre production, water retention, and disease control [http://ecofinders.dmu.dk/](http://ecofinders.dmu.dk/).

ecoSERVICES also works on the adaptability of food systems for food security in the face of climate change in the project on Agrobiodiversity for climate change adaptation. This project assesses the existing evidence base related to the contribution of crop and livestock biodiversity conservation and sustainable use to climate change adaptation, together with the identification of research gaps. It aims at informing the policy debate as well as related donor dialogue, and to counter the usual investment in agricultural innovations (e.g. breeding programmes, agrochemicals and irrigation). The project ran a workshop on 8-11 October 2013 in Roma, Italy, that started the assessment. Partners and contributors of this project are: Basque Centre for Climate Change (BC3), Bioversity International (CGIAR), the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS), contributions from DIVERSITAS, and the Food and Agriculture Organisation of the United Nations (FAO).

**GEO BON Working Group 6: Ecosystem Services**
In 2014, ecoSERVICES continued its membership with the WG6 on Ecosystem Services of GEO BON. In particular, B. Martín-López (SC-ecoSERVICES) gave a presentation entitled Overview presentation of the DIVERSITAS projects where she showcased how the DIVERSITAS projects co-produce knowledge on biodiversity and ecosystem services with stakeholders, communicate their findings to international policy fora and interested institutions and thus play the role of bringing the much needed information to help IPBES meet its goals. This presentation was given as part of the session on Monitoring ecosystem services to support decision-making organised by GEO BON WG6 during the 7th ESP conference (8-12 September 2014, San Jose, Costa Rica). The objective of the session was to discuss a joint strategy for monitoring ecosystem services to respond to the needs of IPBES by organising concerted action between the many groups and networks across the globe that monitor and conduct research on ecosystem services.
ecoHEALTH
Building bridges between biodiversity science and health

Chair: P Daszak, EcoHealth Alliance, USA
www.diversitas-international.org/ecohealth

The ecoHEALTH project seeks to understand the health implications of current and anticipated global environmental change to identify solutions that will promote both human health and ecosystem integrity. After the success of the scientific efforts initiated in the first three years of the ecoHEALTH project around the economic implications of emerging infectious diseases and the connections between biodiversity and emerging diseases, in 2014, ecoHEALTH expanded its mandate to build on past work and address additional growing public and ecosystem health concerns stemming from environmental change and biodiversity loss. Its current areas of scientific and policy focus include:

- Economics of emerging diseases
- Relation between biodiversity and emerging diseases
- Leveraging health impacts to mitigate the underlying drivers of conservation threats and disease emergence
- Impacts of climate change and demography on global health

Research in these areas will help increase the societal relevance and solutions generated from the ecoHEALTH project, given the many health implications of changing environmental conditions. In line with the expanded areas of focus, the ecoHEALTH Scientific Committee (SC) was also broadened to include expertise on climate change, nutrition, food production and food security, social sciences, pollution and toxicology, development, public health, and health-animal-environmental policy. These disciplines complement the strong ecology and economic expertise of the SC and will enable synergies in scientific initiatives and policy outputs.

The DIVERSITAS ecoHEALTH Economics of Emerging Diseases project (DEEED)
The objective of DEEED is to provide a bio-economic modelling framework to evaluate the risk posed by Emerging Infectious Diseases (EIDs) from wildlife in trade, land use change, agricultural intensification, and other drivers of biodiversity loss. Quantification of economic damages caused by emergence of new diseases from deforested regions may provide a mechanism to better identify the ecosystem services from intact forest.

ecoHEALTH activities over the past year have tied into USAID-funded projects on predicting and preventing emerging pandemic threats and investigating health costs of altered landscapes.

The DIVERSITAS ecoHEALTH on Biodiversity and Emerging Diseases project (DEBED)
This project seeks to investigate positive and negative relationships between biodiversity and disease transmission dynamics to better understand the ecological drivers of emerging infectious diseases. Through continued funding from the French Centre for Synthesis and Analysis (CESAB) of the French Foundation for Biodiversity Research (FRB), for the BIODIS initiative: “Disentangling the linkages between biodiversity and emerging infectious diseases”, BIODIS workshops were held in Aix-en-Provence, France, in November 2013, July and December 2014. Recent work has focused on the influence of meta-community structure, biodiversity, and the dilution effect theory on disease transmission risks, as well as approaches for study of the health-biodiversity relationships. Over the past year, BIODIS research has been
published in prominent journals including *The American Naturalist* and additional scientific and policy papers are in progress or have been recently submitted. Several Postdoctoral and Fulbright Masters Fellows have also initiated research contributing to the BIODIS project over the past year.

**Science – Policy activities**

As part of ecoHEALTH’s commitment to translating scientific advancements into societal solutions, the ecoHEALTH team contributed to numerous policy strengthening and implementation initiatives, including:

- Providing the section on Health and Biodiversity for the IUCN’S Position Paper for the Convention on Biological Diversity’s (CBD) 18th meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA-18), and presented on “Fostering synergies between biodiversity & human health: towards the post-2015 development agenda” (SBSTTA-18; Montreal, Canada; June 2014)

- Serving on the Coordinating Committee for the CBD-WHO Technical Series

- Presenting on “the role of global institutions and NGO’s” in relation to the ecoHEALTH project (EcoHealth Conference; Montreal, Canada; August 2014)

- Leading a side event in collaboration with the Secretariat of the CBD, EcoHealth Alliance, and WHO titled “Infectious Diseases and Biodiversity: Using a “One Health” Approach to Benefit Conservation and Health” (CBD COP 12; Pyeongchang, Korea; October 2014)

**Capacity building activities**

- Ecology, Environmental Science and Health Research Network (RCN EcoHealthNet): This NSF-funded project aims at providing graduate training on ecoHEALTH activities. The fourth workshop was organised in August 2014 at George Mason University and Smithsonian Institution (Front Royal, VA, USA) on two major themes: Epidemiology and Management of Infectious Diseases in Wildlife.
Global Mountain Biodiversity Assessment (GMBA)
Exploring and understanding mountain biodiversity

Co-chairs: **C Körner**, Institute of Botany, University of Basel, Switzerland, **M Fisher**, University of Bern, Switzerland
http://gmba.unibas.ch and www.mountainbiodiversity.org

The Global Mountain Biodiversity Assessment (GMBA) actively explores and explains the great biological richness of the mountains of the world. GMBA seeks to provide input to policy makers and stakeholders for the conservation and sustainable use of biodiversity in mountain regions.

**New GMBA mountain portal and partnership with Map of Life (MoL)**
MoL (mol.org) is a biodiversity portal project, which aims at integrating disparate distribution data worldwide and enable up- and down-load of a variety of distribution data types (points, surveys, range maps). GMBA cooperates with MoL to add the mountain layers defined by Körner et al (2011) and a set of polygons of mountain areas of the world. MoL is implementing these layers and performs specific queries for mountains. For the first time it will be possible to assess mountain biodiversity in more than 1000 defined mountain regions of the globe in a bioclimatic context, rooted in a novel treeline algorithm. A new version of the portal prototype should go online in 2015.

**Mountain Long-Term Ecological Research (LTER) network**
Since 2011, GMBA has been providing the framework and coordination of the mountain LTER network. The aim is to form a nucleus of core sites that will use common protocols to ensure comparability of data detect effects of global change. This network will be able to capture slow processes or transient, episodic or infrequent events, reveal trends, multi-factor responses, or processes with major time lags. Following the conference “Mountains under Watch 2013” in Aosta, Italy, GMBA co-organised a second workshop of the mountain LTER network. Participants identified the best procedures and strategies for initiating common activities and/or meta-analysis for the next years. These results were presented at INTECOL in London in August 2013. In summer 2014, a following workshop “A global observatory network for alpine ecosystems” took place at the Global fair on Mountain Observatories in Reno, Nevada, USA. The session aimed at facilitating coordination, integration, and synthesis for existing sites, to foster multi-site analyses and synthesis of current status and future trends of global change on mountain systems.

LTER sites involved so far are: Niwot Ridge, Rocky Mountains, USA, Valle d’Aosta, Italy, Lautaret, Central French Alps, France, Sierra Nevada, Spain, Tyrolean High Alps, Austria, Furka region, Switzerland, Ordesa and Monte Perdido National Park, Spain, Paione Lakes, Italy, Pyramid Lakes, Nepal, Redon-Aigüestortes, Spain, Collelongo, Italy.

**Implementing the Future Earth agenda**
GMBA was granted of a Cluster Activity on “Global Biodiversity Monitoring, Prediction & Reporting”, together with representatives of 10 other organisations (e.g. ecoSERVICES, GEO BON, bioGENESIS, IPBES), which started during the last trimester of 2014 and will continue until spring 2016. The planned workshops will bring together the observational, remote sensing and modelling communities (in Future Earth and beyond) that are collecting and using spatio-temporally explicit biodiversity or environmental data.

Additional activities in 2013-2014
- **Conference: Faster, Higher, More?** Past, present and future dynamics of arctic and alpine flora under climate change, 23-25 September 2013, Bergün, Switzerland.
- **MIREN** (Mountain Invasion Research Network, www.miren.ethz.ch) and **GLORIA** (Global Observation Research Initiative in Alpine Environments, www.gloria.ac.at) are initiatives associated to GMBA.
Biodiversity and urbanisation (bioSUSTAINABILITY)

Science for the conservation and sustainable use of biodiversity

Chair: T Elmqvist, Stockholm Resilience Centre, Sweden

www.diversitas-international.org/biosustainability

bioSUSTAINABILITY developed new knowledge to guide policy and decision making that support sustainable use of biodiversity and ecosystem services. It studied the social, economic and political context of management and governance of biodiversity and ecosystem services. The programme shifted towards having an increasingly strong urban focus, and during 2013-2014 transformed into an urban research agenda in the context of the transition towards Future Earth. In that context, it increasingly worked with the other projects dealing with urbanisation of the Global Environmental Change family.

Cities and Biodiversity Outlook

Following up on the collaboration between bioSUSTAINABILITY and the Convention on Biological Diversity on the topic of biodiversity and urbanisation, which led to the release of the assessment Cities and Biodiversity Outlook (2012), the closing of the project and the forming of the new urban agenda saw the publication of a benchmark book Urbanization, Biodiversity and Ecosystem Services – A Global Assessment. This publication contains the scientific foundation of the CBD Cities and Biodiversity Outlook. This book, an open access Springer publication, is one of the 30 most downloaded books in Springer’s 170,000 titles library. The project also saw the launch of a short video narrated by Edward Norton, An Urbanizing Planet, available in English, Hindi and Chinese on www.cbobook.org. The book and the video were launched at the UN Headquarters, New York, October 4, 2013.

The URban Biodiversity and Ecosystem Services (URBES) project

The three-year, pan-European, BiodivERsA-funded project focusing on urbanisation processes and impacts on biodiversity and ecosystem services launched in January 2012 is nearing its 2014 end. URBES builds on four case studies of European cities, Stockholm, Berlin, Rotterdam and Salzburg, and also includes metropolitan New York. The project has a focus on urbanisation processes mainly in Europe, functional diversity, urban ecosystem services, institutions, monetary and non-monetary values, and resilience science. In addition to producing an extensive list of publications, two full-day training sessions with city representatives from across Europe have been organised in 2013 and 2014, aiming to help bridging the knowledge gap between science and policy-making, and between experts across cities. Since the summer of 2013, the project has also produced videos from Rotterdam and Barcelona to highlight transition initiatives and the importance of urban green areas.

Implementing the Future Earth agenda

As part of the ten initial Fast Track Initiatives of Future Earth, one is dedicated to urbanisation: What is urban? – The urban research agenda aiming at developing – based on the many urban related initiatives of the Global Environmental Change Programmes – the urban component of global sustainability science. What is urban? will be the continuation of bioSUSTAINABILITY and explore the concept of urban from a range of academic disciplines’ perspectives, taking into account the urban cores as well as the urban-rural linkages.
Global Water System Project (GWSP)

Co-chairs: C Pahl-Wostl, University of Osnabrück, Germany, and C Vörösmarty, The City University of New York, USA

www.gwsp.org

The central research question of the GWSP is: “How are humans changing the global water cycle, the associated biogeochemical cycles, and the biological components of the global water system; and what are the social feedbacks arising from these changes?”.

GWSP’s findings highlight that water must be a priority on all political agendas given its global scope and interconnectedness in a world that is facing the possibility of pushing planet Earth beyond its carrying capacities. A sustainable water world must reflect political and societal dynamics, aspirations, beliefs, values, and their impact on our own behaviour as well as physical, chemical, and biological components of the global water system at a range of spatial and temporal scales.

An important event for GWSP in May 2014 was its open conference: “Sustainability in the Water-Energy-Food Nexus”, during which a “Call to Action” was released and handed to representatives of the public and private sectors. While the majority of participants where scientists, many policy makers, representatives from the private sector and NGOs actively participated in the conference. The conference was complemented by the “GWSP Summer Water Academy” for early career scientists on “Communicating Science in the Water-Energy-Food Nexus”.

The book “The Global Water System in the Anthropocene – Challenges for Science and Governance” (Springer) edited by A Bhaduri, J Bogardi, J Leentvaar and S Marx, was published this year. The book is one of the major outcomes of the GWSP Conference “Water in the Anthropocene” (May 2013, Bonn, Germany). This peer-reviewed book addresses the worldwide experiences on the responses of water management to global change within this last decade. Its 28 chapters reflect the shift in mind-set that is required to address the water challenges of tomorrow, discussing issues such as water governance and related institutional and technological innovations as well as variability in supply, increasing demands for water, environmental flows, and land use change.
Global Environmental Change and Human Health (GECHH)

Chair: M Rosenberg, Queen’s University, Canada
www.gechh.unu.edu

The primary goals of GECHH involve identifying and characterising health risks due to global environmental change; developing, assessing and communicating adaptation strategies; and fostering research training programmes to boost international research capacity. GECHH researchers have worked towards these goals through a series of symposia, publications, and training workshops. Since 2009, GECHH has been an active partner in symposia and student training workshops with the Chinese Academy of Sciences Institute for Geographic Sciences and Natural Resources, bringing together young scientists to examine the issues of health and the environment in megacities.

Global Carbon Project (GCP)

Co-chairs: N Nakicenovic, International Institute for Applied Systems Analysis, Austria and R Jackson, School of Earth Sciences, Stanford University, USA
www.globalcarbonproject.org

GCP aims at developing a comprehensive policy-relevant understanding of the global carbon cycle, encompassing natural and human dimensions at their intersections. The Tsukuba International Office is mainly focused on Urban and Regional Carbon Management (URCM), which is a place-based and policy-relevant scientific initiative aimed at promoting sustainable, low-carbon, and climate-resilient urban development.

In 2013, GCP found that for 2012, fossil fuel emissions grew to 9.7 GtC yr⁻¹, 2.2% above 2011, reflecting a continued growing trend in these emissions, and leading to the largest increase in atmospheric CO₂ of 5.1 GtC yr⁻¹. Land and ocean sinks were stable or grew. Regarding the methane budget, the project found that after over a decade of stable methane concentrations, growth resumed in 2007 and has been growing since then due to increased emissions from wetlands and the combustion of fossil fuels. In November 2013, the Global Carbon Atlas was launched, becoming one of the major interfaces between GCP research products and three very distinctive audiences: outreach (general public); emissions (policymakers, NGOs and the corporate world); and research (the scientific community with model and other flux and pool carbon data). The Atlas received 25,000 unique visits during the first week after the launch. This Atlas is updated every year and the global carbon budget is released every November.
Climate Change, Agriculture and Food Security (CCAFS)

Chair: T Rosswall
http://ccafs.cgiar.org/

CCAFS, a joint initiative between the CGIAR and the global change research community, completed its 4th year of operation in 2014.

Activities in the last 18 months included the further development of portal for accessing downscaled climate scenarios. Biodiversity scientists from academia and research institutes are major users of the portal. The Platform for Agrobiodiversity Research is now hosting a new tool, the REFARM (the Resilience Framework for Agriculture and Risk Management) Database. The database serves as a tool to search successful adaptation strategies based upon diversification.

Multistakeholder research teams in 9 countries, led by Bioversity, continue to analyse their existing access and benefit sharing laws for plant genetic resources vis-a-vis their international commitments to participate in an international system of crop genetic diversity pooling and sharing for agricultural research. Partners published a road map for policy and institutional reforms in India that need to be undertaken to implement the multilateral system of access and benefit sharing. Eight countries initiated exercises to confirm what crop genetic resources they will include in the multilateral system of access and benefit sharing. One completed the exercise, and the other seven will finish in 2014, sending notification to the secretary of the plant treaty.

One of our focus was on the exploration of crop wild relatives as sources of genetic diversity for agricultural adaptation, and on neglected and under-utilised species as resilient options for communities in Nepal, Bolivia and India. Training courses, targeting women farmers and other vulnerable groups were organised on cultivation practices for under-utilised crops.

Global efforts to adapt staple foods like rice, wheat, and potato to climate change have been given a major boost by new research that reveals the details and whereabouts of their “wild relatives” – their undomesticated distant cousins that could contain genetic secrets to making food crops more productive and resilient. Close to three quarters of these plants are in serious need of protection. The study and collecting work are part of a major 10-year project funded by the government of Norway to help boost the resilience of staple foods crops to climate change.
Building a Global Biodiversity Observation System: GEO BON

www.diversitas-international.org/geo-bon

Background: the Global Earth Observation System of Systems (GEOSS)
The Group on Earth Observations (GEO; http://earthobservations.org/) is leading a process to build a Global Earth Observation System of Systems (GEOSS), designed around nine Societal Benefit Areas (SBAs): disasters, health, energy, water, weather, ecosystems, agriculture and biodiversity. The initiative to build a global observing system for biodiversity is called “GEO BON”, which stands for “Group on Earth Observations – Biodiversity Observation Network”. DIVERSITAS has played a role of founding organisation, and, then, of catalyst for many of the activities of GEO BON. GEO BON is being built by some 100 governmental and non-governmental organisations.

The vision of GEO BON
The vision of GEO BON is for a coordinated, global network that gathers and shares information on biodiversity, provides tools for data integration and analysis, and contributes to improving environmental management and human well-being.

The GEO BON implementation plan
The vision of GEO BON has been translated into an implementation plan, first published in May 2010, which proposes to the global observing community activities and deliverables at the genetic, species and ecosystem levels, including ecosystem services, in terrestrial, freshwater and marine ecosystems.
A series of deliverables are foreseen for 2015 as a contribution to the review of GEOSS implementation plan and the design of the new one.

GEO BON contributes to the implementation of the Strategic Plan for Biodiversity 2011-2020
In response to a request made by CBD-COP10, the GEO BON community produced the GEO BON Adequacy report of Biodiversity Observations Systems to support the CBD 2020 Targets. This report constitutes the first attempt to assess the adequacy of global observation systems for the monitoring of biodiversity, specifically in relation to the information needs of the twenty ‘Aichi targets’ defined by the Convention on Biological Diversity (CBD) for the period 2011-2020. CBD-COP11 invited GEO BON to continue its work on the identification of Essential Biodiversity Variables (EBVs) and the development of...
associated data sets, as presented in the GEO BON Adequacy report. In response to this mandate GEO BON organised an Expert Workshop on enhancing biodiversity data and observing systems in support of the implementation of the Strategic Plan for Biodiversity 2011-2020 at SBSTTA 17 (12 Oct 2013, Montreal, Canada). The overall goal of this workshop was to engage governments and organisations in a dialogue with the Earth observation community, particularly GEO-BON, on the development of biodiversity observation systems, both by learning from existing experiences and helping to start new programmes. This workshop attracted an audience of 80 participants from 50 countries and international organisations, and discussed ways to improve collection and use of observations by Parties in monitoring and reporting progress in implementing NBSAPs and thereby achieving progress towards the Aichi Biodiversity Targets. Discussions also addressed how GEO BON that can support delivery of improved biodiversity observations and their use.

**Essential Biodiversity Variables**
A key obstacle for the implementation of the Strategic Plan for Biodiversity 2011-2020 is the lack of consensus about what to monitor. GEO BON partners have engaged in a process to identify the most essential variables that would fulfil criteria related to scalability, temporal sensitivity, feasibility, and relevance, and could form a core set for monitoring programs worldwide. This initiative is presented in Pereira et al. 2013. A call to develop products supporting the development of EBVs was launched in April 2014. Twenty-four proposals have been received and five projects granted:
- Black listing invasive species for monitoring and reporting (Monash University, Australia)
- BON in a Box (Humboldt Institute, Colombia)
- Developing guidelines for standardised global butterfly monitoring (UNEP-WCMC and Dutch Butterfly Conservation)
- Finalising, visualising and communicating global remote-sensing supported species EBVs and change indicators (Yale University, USA)
- Remote sensing of Essential Biodiversity Variables (Twente University, the Netherlands)

**BON in a BOX**
Another key challenge is the lack of consensus on how to monitor biodiversity as well as how to collect, manage, and utilise biodiversity data. BON in a Box compiles a scientifically sound and field proven set of methods, guidelines, tools, manuals and field and data standards to monitor biodiversity to facilitate the development of national and regional biodiversity observation systems geared to monitor biodiversity change, to (i) fulfil reporting requirements (national and global, e.g. CBD), (ii) aid decision-makers, and (iii) inform policy responses.

**Key developments in 2013-14**

**October 2013**
- Expert Workshop on enhancing biodiversity data and observing systems in support of the implementation of the Strategic Plan for Biodiversity 2011-2020 (SBSTTA 17, Montreal, Canada)
The initial role of DIVERSITAS has been to coordinate the development of the GEO BON concept and implementation plan, and to ensure, in particular, that GEO BON develops within a robust scientific framework. The role of DIVERSITAS through its projects has been also to provide the needed underlying science for GEO BON.

1) Science-policy work: Represent GEO BON at CBD (COP and SBSTTA) and IPBES, and position GEO BON within the science-policy interface as the global observing system for biodiversity;

2) Funding: Provide funding for two GEO BON working groups:
   a) the genetic diversity working group,
   b) the ecosystem services working group;

3) Core support: DIVERSITAS, for example, gather funding for the GEO BON activities such as the EBVs projects.

Next steps
GEO BON continues to move in the following directions to help governments and international organisations such as CBD and IPBES to assess progress against biodiversity and sustainability targets:
- Enlarge the global GEO BON network of Biodiversity Observation Initiatives and encourage the formation of national and regional Biodiversity Observation Networks (BONs)
- Develop and promote monitoring and data standards to allow Biodiversity Observation Initiatives to enhance biodiversity data interoperability and publishing standards, and more generally BON in a Box
- Develop and promote a set of Essential Biodiversity Variables (EBVs) that represent the key variables needed to monitor and understand biodiversity change

January 2014
- Group on Earth Observation Plenary-GEO-X (Geneva, Switzerland)
  Day on Biodiversity Observation jointly organised with Switzerland. The main objective was to raise awareness of the importance of the GEO biodiversity and ecosystem services activities. The recommendations of the meeting were presented during the GEO-X Plenary.

April 2014
- EU BON meeting (Crete, Greece)
- GEO meeting (Geneva, Switzerland)

June 2014
- GEO BON Joint Advisory Board Meeting and Implementation Committee Meeting (Leipzig, Germany): a new governance structure was approved at this meeting.
- European GEO meeting (Athens, Greece)
IPBES was formally established by representatives of more than 90 Governments in Panama City on Saturday 21 April 2012, following several years of international negotiations. DIVERSITAS has actively promoted IPBES over the past years, has been contributing to the implementation of its first work programme (2014-2018), and looks forward to continue generating scientific knowledge relevant to future IPBES assessments.

I- Second Plenary (IPBES-2), 9-14 December 2013, Antalya, Turkey

IPBES-2 focussed on the following issues:

A] IPBES conceptual framework
This framework includes six interlinked elements constituting a social ecological system that operates at various scales in time and space: nature; nature’s benefits to people; anthropogenic assets; institutions and governance systems and other indirect drivers of change; direct drivers of change; and good quality of life. This framework also integrates conceptualisations of these elements in different knowledge systems (scientific, indigenous and local knowledge).

B] Work programme of IPBES
Following up on the requests received from the platform Members, MEAs, and stakeholders (including DIVERSITAS/ICSU), the MEP prepared a work programme for the next 4 years including 4 main objectives (including 16 deliverables):

- Strengthen the capacity and knowledge foundations of the science-policy interface to implement key functions of the Platform
- Strengthen the science-policy interface on biodiversity and ecosystem services at and across subregional, regional and global levels

The Intergovernmental Platform on Biodiversity and Ecosystem Services, IPBES
www.ipbes.net
www.diversitas-international.org/ipbes
Strengthen the science-policy interface on biodiversity and ecosystem services with regard to thematic and methodological issues. Communicate and evaluate Platform activities, deliverables and findings.

IPBES-2 also approved the initial scoping for three fast-track assessments on: Pollination and pollinators associated with food production, Models and scenarios for biodiversity and ecosystem services, and Value, valuation and accounting of biodiversity and ecosystem services.

C] Operationalisation of the platform
The plenary adopted a set of Rules and Procedures regarding the selection of MEP members, the delivery and approval of the platform deliverables.

The plenary also adopted the IPBES institutional arrangements between FAO, UNDP, UNEP and UNESCO.

No decision was reached on the policy for admission of observers, the Stakeholder Engagement Strategy, and collaborative partnership arrangement.

Finally, an important outcome of the meeting was the announcement of the nomination of Anne Larigauderie, former DIVERSITAS Executive Director, as the IPBES Executive Secretary.

II. Contribution of DIVERSITAS to the IPBES

A] IPBES-2 (December 2013)
1- The ICSU Delegation at IPBES-2 included A-H Prieur-Richard (Head of delegation), E Brondizio, B Cardinale, W Cramer, A Larigauderie, H Mooney and U Pascual.

2- DIVERSITAS provided comments on some of the key papers prepared for IPBES-2 including: Conceptual framework, Programme of work, Scoping of the three fast-track assessments, Procedures for the preparation of the Platform’s deliverables, and Stakeholder engagement strategy.

3- DIVERSITAS, on behalf of ICSU, and IUCN co-chaired the multi-stakeholder days (7-8 December 2013), and co-organised a side event on the Stakeholder Engagement Strategy and the outcomes of the Stakeholders Days on 9th December 2013.

B] Preparing for IPBES-2 (December 2013) and IPBES-3 (January 2015)
1- DIVERSITAS provided comments on the draft Conceptual Framework, the proposed scoping process for assessments, and other IPBES deliverables.
2- DIVERSITAS submitted names of experts for the intersessional workshop on Finalising the conceptual framework (August 2013, Cape Town, S-Africa).

3- DIVERSITAS also submitted names of international experts, from the social and natural sciences, for the deliverables 1c, 1d, 2a, 2b, 3a, 3c, 3d, and 4c of the work programme. 86 experts were selected representing a broad range of disciplines and countries.

4- DIVERSITAS, on behalf of ICSU, and IUCN have been co-leading activities toward a draft stakeholder engagement strategy for the implementation of the IPBES programme of work, following up on the request of IPBES-1 which invited IUCN and ICSU “to work with relevant stakeholders, including indigenous peoples and local communities and the private sector, and with the secretariat, to prepare in consultation with the Bureau and the Multidisciplinary Expert Panel a draft stakeholder engagement strategy for supporting the implementation of the work programme”. Following up a large consultation, an expert workshop, and the discussions at the Stakeholders days in the margins of IPBES-2, this document – including early thoughts for an implementation plan – was presented at IPBES-2. However, due to lack of time, this document was not discussed and its approval is on the agenda of IPBES-3. In that context, DIVERSITAS and IUCN are continuing the mobilisation of stakeholders and will facilitate the Stakeholders day at IPBES-3.

III. Global Biodiversity Outlook 4 (GBO-4)

DIVERSITAS, in collaboration with the UNEP World Conservation Monitoring Centre (UNEP-WCMC), the Netherlands Environmental Assessment Agency (PBL), the Fisheries Centre of University of British Columbia (UBC-FC), the Centre of Environmental Biology of the University of Lisbon, and later the German Centre for Integrative Biodiversity Research Halle-Jena-Leipzig (iDIV) led the preparation of the technical support document for GBO-4. The work was coordinated by P Leadley (Chair, SC-bioDISCOVERY) and C Krug (Science Officer, bioDISCOVERY office).

Integrating extrapolations of current trends with socio-economic scenarios and “storyline” approaches, the assessment examined the progress towards achieving each of the 2020 Aichi Targets. It highlighted in particular which actions are necessary to achieve the Aichi Targets, and how this will contribute to achieve the 2050 vision and the Millennium Development Goals as well as the Sustainable Development Goals under development.

The GBO-4 and its supporting document were launched at CBD COP12 in Pyeongchang, Republic of Korea, where they were positively received by delegates. The GBO-4 technical support document is available at http://www.cbd.int/doc/publications/cbd-ts-78-en.pdf.

Two scientific publications arising from the technical support document have been published in Science and Basic and Applied Ecology, and other ones are in preparation.
DIVERSITAS contributes to the work of the United Nations Rio Conventions.

DIVERSITAS actively contributed to the implementation of the Strategic Plan for Biodiversity 2011-2020 led by the Convention on Biological Diversity (CBD), over 2013-14. This plan, which includes the 20 Aichi Biodiversity Targets, provides an overarching framework for biodiversity, not only for the biodiversity-related conventions, but for the entire United Nations framework.

DIVERSITAS made a contribution to the work of the SBSTA of the UN Framework Convention on Climate Change (UNFCCC).

DIVERSITAS also made contributions to the post-2015 UN process on the development of the Sustainable Development Goals (SDGs).

Convention on Biological Diversity

I- Contributing to CBD work on indicators and monitoring

DIVERSITAS currently contributes to the work on the 2020 targets, via its contribution to GEO BON (see page 25):

- GEO BON contribution to the work of the Ad Hoc Technical Expert Group (AHTEG) of the CBD on indicators for the Strategic Plan 2011-2020
- GEO BON work on Essential Biodiversity Variables.

II- Contributing to the 4th Global Biodiversity Outlook (GBO-4)

CBD COP 10 requested to prepare a 4th report of the Global Biodiversity Outlook (GBO-4). The CBD secretariat issued a call for proposals to carry out this work. The proposal submitted by DIVERSITAS and partners to prepare the technical document for GBO-4 was selected.

Under this agreement, DIVERSITAS was, in collaboration with the UNEP World Conservation Monitoring Centre (UNEP-WCMC), the Netherlands Environmental Assessment Agency (PBL), the Fisheries Centre of University of British Columbia (UBC-FC) and the Centre of Environmental Biology of the University of Lisbon, carrying out a scenarios assessment. This work was led by Paul Leadley and Henrique Pereira.
(bioDISCOVERY), and supported by the bioDISCOVERY IPO, Cornelia Krug.

The technical support document of the GBO-4 was launched at CBD COP12 in October 2014 in Republic of Korea. This document presents the different lines of evidence used for the assessment of the state of biodiversity, and detailed information on findings and country case studies related to specific targets.

III- Contributing to the work on Access and Benefit-Sharing (ABS)

The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity (in short, Access and Benefit-Sharing, ABS) aims at regulating the access to genetic resources and the fair and equitable sharing of the benefits derived from their utilisation.

Biodiversity scientists currently face many barriers when conducting research with materials (e.g. biological samples) from abroad often because there is a lack of understanding of the respective concerns and needs of researchers and policy-makers.

DIVERSITAS, thanks to a grant from ICSU, supported the implementation of Article 8(a) of the Nagoya Protocol that calls for facilitated access for non-commercial biodiversity research.

DIVERSITAS' project “Access and Benefit-Sharing in Latin America and the Caribbean: A science-policy dialogue for academic research” aimed at bringing together researchers and policy-makers from Latin America and the Caribbean to discuss current obstacles regarding access to biological material, clarify the needs of Academia and government agencies, and build mutual trust. The project is a continuation of the work undertaken by the Swiss Academy of Sciences on developing good practices for academic research. It is a partnership between DIVERSITAS, ICSU Regional Office for Latin America and the Caribbean (ICSU ROLAC), International Union of Biological Sciences (IUBS), and Swiss Academy of Sciences (SCNAT). It was endorsed by the CBD and undertaken in collaboration with two other ABS projects in the region: the UNEP/GEF Regional project coordinated by IUCN-Sur and the project of the University of Bonn-DFG.

Major events in 2013-14 included the Science-Policy Workshop on Access and Benefit-Sharing for Non-commercial Academic Research (20-22 November 2013, Lima, Peru) which addressed the identification of benefits from non-commercial, academic research, challenges and opportunities for implementing access and benefit-sharing in the LAC region, and the comparison of different legal systems of access and benefit-sharing of the represented countries. The event was successful and constructive at initiating a science-policy dialogue and led to a series of publications: a 2-page summary on key messages, a 25-page brochure compiling all project’s findings, and case studies from several LAC countries.

The outcomes of this project were presented in different conferences including a side event at the CBD COP12 during which the Nagoya Protocol entered into force.

IV- Contribution to the topic on biodiversity and health

Over the past years, DIVERSITAS, in particular its ecoHEALTH project, has supported the work of the CBD on the relationships between biodiversity and health. DIVERSITAS supported the development of the CBD-WHO joint
publication “Connecting Global Priorities: A State of Knowledge Review on the Interlinkages between Biodiversity and Human Health”, and participated in the release of its first draft during COP12.

Health was formally on the agenda for discussion under the Sustainable Development Goals. CBD Parties expressed strong concerns over the devastating ongoing Ebola outbreak in West Africa, giving a call to action on the urgent need for research on the links between human health and biodiversity and more collaborative efforts between the biodiversity and health communities to tackle shared threats. As part of the CBD’s decisions on health, the Convention now formally “recognises the value of a One Health approach” that considers human, animal and environmental health linkages. In collaboration with partners including the ecoHEALTH project, the CBD will undertake a synthesis report on the underlying drivers of disease emergence and biodiversity loss, and will continue developing joint activities with WHO.

V- Contributing to CBD-COP12 (Pyeongchang, Republic of Korea, October 2014)

DIVERSITAS was involved in a series of events during SBSTTA 17 (October 2013) and SBSTTA 18 (June 2014) in preparation of CBD COP12. During COP12, DIVERSITAS organised/participated in the following events:

- Launch of the Global Biodiversity Outlook 4 and of its Technical Support Document
- Side event “The science behind GBO-4 - Introducing the technical support document”
- Side event “Bridging biodiversity science and society: a youth contribution towards mainstreaming GBO-4 findings”
- Side event “Access and Benefit-Sharing in Latin America and the Caribbean: A Science-Policy dialogue for academic research”
- Launch of The State Of Knowledge Review On Biodiversity And Health: “Framing Biodiversity And Health In The Context Of The Post-2015 Development Agenda”
- Side event “Tackling common drivers of disease and biodiversity loss: a One Health approach”
- Press conference on Ebola and biodiversity
- Side event “How can science really add value to global biodiversity governance? Discussing the effectiveness of science-policy-interfaces”
UN Framework Convention on Climate Change (UNFCCC)

DIVERSITAS has been invited over the past years by the SBSTA of the UNFCCC to participate in annual “Research Dialogues” between Parties to UNFCCC and Global Environmental Change programmes on emergent scientific findings relevant to the needs of this convention.

In June 2014 (Bonn, Germany), Sybil Seitzinger (Executive Director, IGBP) reported at the Research Dialogue session at SBSTA 40 of UNFCCC on behalf of the four ICSU Global Environmental Change programmes (DIVERSITAS, IGBP, IHDP and WCRP). She gave presentations on the following topics:

- Recent developments in global climate information
- Emerging scientific findings: the polar regions

DIVERSITAS presentation: “New global biodiversity scenario analysis: showcasing win-win situations for climate and biodiversity”

The contributions were made available to Parties on the UNFCCC website at: http://unfccc.int/

Post 2015 process on Sustainable Development Goals (SDGs)

www.diversitas-international.org/sdgs

One of the main outcomes of the United Nations Conference on Sustainable Development (Rio+20), held in Rio de Janeiro in June 2012, was the agreement by Member States to launch a process to develop a set of Sustainable Development Goals (SDGs). The goals should address in a balanced way all three dimensions of sustainable development and be coherent with and integrated into the UN development agenda beyond 2015.

A 30-member Open Working Group (OWG) of the General Assembly, established in January 2013, was tasked with preparing a proposal on the SDGs. DIVERSITAS participated in two sessions of this OWG:

- Sustainable cities and human settlements (7th session, 6-10 January 2014, New-York)
- Oceans and seas, forests, biodiversity (8th session, 3-7 February 2014, New-York)

In preparation of these sessions, the DIVERSITAS community published two position papers: 1) Contribution of Biodiversity to Sustainable Development Goals, and 2) Urban Social-Ecological Systems, Sustainability and Resilience-Implications for SDGs and Development of Indicators.

In addition, during these two sessions, DIVERSITAS, as part of the ICSU delegation representing the Science and Technology Major Group, gave a plenary address (Jane Lubchenco on Oceans and Seas, Biodiversity and Forests) and delivered several statements.
PUBLICATIONS

2014


2013


• Renaud FG, Svyitski JPM, Sebesvari Z, Werners SE, Kremer H, Kuenzer C, Ramesh R, Jeuken A and Friedrich J. 2013. Tipping from the Holocene to the Anthropocene: How threatened are major world


• **Sudhira HS and Nagendra H.** 2013. Local Assessment of Bangalore: Graying and Greening in Bangalore – Impacts of Urbanization on Ecosystems, Ecosystem Services and Biodiversity. In: Elmqquist T et al. (Eds). Urbanization, Biodiversity and Ecosystem Services: Challenges and Opportunities. Springer. 75-91


• **Haase D.** 2013. Shrinking Cities, Biodiversity and...
Ecosystem Services. In: Elmqvist T et al. (Eds). Urbanization, Biodiversity and Ecosystem Services: Challenges and Opportunities. Springer. 252-274


- Urbanization, Biodiversity and Ecosystem Services: Challenges and Opportunities. Springer. 337-354


- Goodness J and Anderson PML. 2013. Local Assessment of Cape Town: Navigating the Management Complexities of Urbanization, Biodiversity, and Ecosystem Services in the Cape Floristic Region. In: Elmqvist T et al. (Eds).
PUBLICATIONS

Urbanization, Biodiversity and Ecosystem Services: Challenges and Opportunities. Springer. 464-484

• Solecki W and Marcotullio PJ. 2013. Climate Change and Urban Biodiversity Vulnerability. In: Elmqvist T et al. (Eds). Urbanization, Biodiversity and Ecosystem Services: Challenges and Opportunities. Springer. 485-504


Zuntini A, Fonseca L and Lohmann L. 2013. Primers for phylogeny reconstruction in Bignonieae (Bignoniaceae) using herbarium samples. *Applications in Plant Sciences*. 1(9)

Below is a summary of all events directly organised or co-organised by DIVERSITAS between June 2013 and December 2014.

<table>
<thead>
<tr>
<th>EVENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>JUNE 2013</strong></td>
</tr>
<tr>
<td>Academic research and ABS in Latin America and the Carribean preparatory meeting</td>
</tr>
<tr>
<td>EcoHealthNet Workshop 2013</td>
</tr>
<tr>
<td>Expert Workshop on the Global Biodiversity Outlook 4 (GBO-4) at CBD SBSTTA18</td>
</tr>
<tr>
<td>Side events at CBD SBSTTA18</td>
</tr>
<tr>
<td>Perspectives from the IPCC and the CBD on climate change and biodiversity: impacts, adaptation and vulnerability</td>
</tr>
<tr>
<td>Fostering Synergies Between Biodiversity and Human Health: towards the post-2015 Development Agenda</td>
</tr>
<tr>
<td><strong>JULY 2013</strong></td>
</tr>
<tr>
<td>SC-GEO BON annual meeting 2013</td>
</tr>
<tr>
<td>IPBES Pan European Stakeholder meeting</td>
</tr>
<tr>
<td><strong>AUGUST 2013</strong></td>
</tr>
<tr>
<td>Symposium at British Ecological Society / INTECOL Joint Conference</td>
</tr>
<tr>
<td>bioDISCOVERY: The TRY initiative</td>
</tr>
<tr>
<td>GMBA workshop: Integrated assessments for IPBES in the framework of a world-wide high mountain environmental observatory system</td>
</tr>
<tr>
<td><strong>SEPTEMBER 2013</strong></td>
</tr>
<tr>
<td>GWSP Side Events at World Water Week 2013</td>
</tr>
<tr>
<td>5th workshop of the TRY initiative</td>
</tr>
<tr>
<td>German National Committee for Future Earth meeting</td>
</tr>
<tr>
<td>bioDISCOVERY – GBO-4 Experts meeting</td>
</tr>
<tr>
<td>Chinese meeting on Future Earth</td>
</tr>
<tr>
<td><strong>OCTOBER 2013</strong></td>
</tr>
<tr>
<td>agroBiodiversity workshop on climate change adaptation</td>
</tr>
<tr>
<td>Expert Workshop on enhancing biodiversity data and observing systems in support of the implementation of the Strategic Plan for Biodiversity 2011-2020 at CBD SBSTTA17</td>
</tr>
<tr>
<td>Side event “Scenarios assessment for the Global Biodiversity Outlook 4” at CBD SBSTTA17</td>
</tr>
<tr>
<td>4th Eco-Evol workshop</td>
</tr>
<tr>
<td>NOVEMBER 2013</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td>German National Committee for Future Earth meeting</td>
</tr>
<tr>
<td>ecoSERVICES workshop</td>
</tr>
<tr>
<td>ecoHEALTH workshop: 2nd BIODIS workshop</td>
</tr>
<tr>
<td>SC-DIVERSITAS extraordinary meeting</td>
</tr>
<tr>
<td>Science-policy workshop on Academic research and ABS in Latin America and the Caribbean</td>
</tr>
<tr>
<td>DECEMBER 2013</td>
</tr>
<tr>
<td>Stakeholder Days at IPBES-2</td>
</tr>
<tr>
<td>Side event “Stakeholder Engagement Strategy and the outcomes of the Stakeholders Days” at IPBES-2</td>
</tr>
<tr>
<td>JANUARY 2014</td>
</tr>
<tr>
<td>Day on Biodiversity Observation at GEO-X</td>
</tr>
<tr>
<td>German Future Earth Summit 2014</td>
</tr>
<tr>
<td>FEBRUARY 2014</td>
</tr>
<tr>
<td>bioDISCOVERY – GBO-4 expert meeting</td>
</tr>
<tr>
<td>bioGENESIS-GEO BON Workshop “Genetic Diversity Report”</td>
</tr>
<tr>
<td>urbanEARTH Scoping Meeting</td>
</tr>
<tr>
<td>MARCH 2014</td>
</tr>
<tr>
<td>bioGENESIS workshop “Phylogeny, extinction risks and conservation”</td>
</tr>
<tr>
<td>SC-bioGENESIS annual meeting</td>
</tr>
<tr>
<td>APRIL 2014</td>
</tr>
<tr>
<td>HarmBio workshop &amp; SC-bioDISCOVERY meeting</td>
</tr>
<tr>
<td>MAY 2014</td>
</tr>
<tr>
<td>HarmBio workshop “Decisions Support Systems for Biodiversity Predictions” (bioDISCOVERY)</td>
</tr>
<tr>
<td>JULY 2014</td>
</tr>
<tr>
<td>ecoHEALTH workshop: 3rd BIODIS meeting</td>
</tr>
</tbody>
</table>
## EVENTS

### AUGUST 2014
- EcoHealth 2014 Conference “Connections for health, ecosystems & society”
  - Montréal, Québec, Canada

### SEPTEMBER 2014
- Symposium at 7th Ecosystem Services Partnership Conference: Monitoring ecosystem services to support decision-making
  - San José, Costa Rica
- DIVERSITAS Celebration
  - Seville, Spain
- SC-DIVERSITAS annual meeting
  - Seville, Spain
- SC-bioGENESIS meeting
  - Seville, Spain
- SC-ecoHEALTH meeting
  - Seville, Spain
- SC-ecoSERVICES meeting
  - Seville, Spain

### OCTOBER 2014
- Side events at COP 12
  - Pyeongchang, Republic of Korea
  - The science behind GB0-4 - Introducing the technical support document
  - Bridging biodiversity science and society: a youth contribution towards mainstreaming GB0-4 findings
  - Access and Benefit-Sharing in Latin America and the Caribbean: A Science-Policy dialogue for academic research
  - Launch of The State Of Knowledge Review On Biodiversity And Health: “Framing Biodiversity And Health In The Context Of The Post-2015 Development Agenda”
  - Tackling common drivers of disease and biodiversity loss: a One Health approach
  - How can science really add value to global biodiversity governance? Discussing the effectiveness of science-policy-interfaces

### DECEMBER 2014
- SC-bioDISCOVERY meeting
  - Lille, France
- ecoHEALTH workshop: 4th BIODIS meeting
  - Aix-en-Provence, France
DIVERSITAS Committees
Expanding network strengthens international framework

DIVERSITAS Committees enlarge DIVERSITAS’ scientific and policy networks, thereby helping to establish crucial links between national biodiversity programmes and international framework activities. They also make it possible to implement the DIVERSITAS strategic plan, adapting where necessary to local and regional concerns. To this end, each DIVERSITAS Committee is encouraged to include representatives from three key groups: active scientists, policy makers and managers of national biodiversity programmes.

The DIVERSITAS National Committees include:

- Full members, who provide an annual financial contribution to DIVERSITAS
- Affiliated members who have identified a contact point or assembled a national committee, but do not contribute financially to the programme.

As Future Earth is getting established some countries are developing Future Earth National Committees bringing together the DIVERSITAS, IGBP, IHDP and WCRP national committees.
DIVERSITAS COMMITTEES’ INITIATIVES IN 2013-2014

The following provides examples of activities undertaken by DIVERSITAS Committees in support of the global science framework.

2013

<table>
<thead>
<tr>
<th>Month</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>July</td>
<td>“Ramsar Kushiro Conference + 20” – Future of Wetlands and the Role of the Ramsar Convention (Japan)</td>
</tr>
</tbody>
</table>
| September | German National Committee for Future Earth workshop (Germany)  
Chinese National Committee for Future Earth workshop (China) |
| October | Belgian Biodiversity Platform Conference: Conservation Research Matters (Belgium)  
Symposium “Risk societies, edge environments: ecosystems and livelihoods in the balance” (Japan) |
| November | German National Committee for Future Earth meeting (Germany)  
Future Earth consultation: “Future Earth in Asia and the Pacific” (Republic of Korea)  
ClimEcol Workshop: From climate to ecology: a dialog between IPBES and IPCC communities (France) |

2014

<table>
<thead>
<tr>
<th>Month</th>
<th>Event</th>
</tr>
</thead>
</table>
| January | Future Earth – GEC projects meetings (USA)  
German Future Earth Summit 2014 (Germany) |
| February | International Workshop on Agro(eco)system Services (Germany) |
| March | 11th International Conference on Urban Health (UK) |
| April | French conference on Biodiversity under the hypothesis of a world at +4°C (France)  
Ecoscope, Metadata Workshop (France)  
15th Swiss Global Change Day (Switzerland) |
| June | Future Earth symposium (China) |
| October | Meeting of Ecoscope, French BON (France)  
BiodivERsA Final conference and funded projects’ kick-off conference (France) |
| November | French meeting of the IPCC and IPBES communities (France) |
# PEOPLE

## DIVERSITAS Scientific Committee

**Chair**
- **Georgina Mace**  
  Imperial College London, UK

**Members**
- **David Cooper**  
  Convention on Biological Diversity, Montreal, Canada
- **Sandra Diaz**  
  Universidad Nacional de Córdoba, Argentina
- **Elva Escobar**  
  Universidad Nacional Autonoma de Mexico, Mexico
- **Carlos Joly**  
  State University of Campinas, Brazil
- **Philippe Le Prestre**  
  Laval University, Canada
- **Mark Lonsdale (Treasurer)**  
  Commonwealth Scientific and Industrial Research Organisation, Australia
- **Hiroyuki Matsuda**  
  Yokohama National University, Japan
- **Harold Mooney (past-Chair)**  
  Stanford University, USA
- **Harini Nagendra**  
  Ashoka Trust for Research in Ecology and the Environment, India
- **Belinda Reyers**  
  Council for Scientific and Industrial Research, South Africa
- **Billie Turner**  
  Arizona State University, USA

## Ex-officio Members

### ICSU
- **Steven Wilson**  
  International Council for Science, France

### IUBS
- **Nils Christian Stenseth**  
  Centre for Ecological and Evolutionary Synthesis, Norway

### CBD
- **Braulio F. de Souza Dias**  
  Executive Secretary, Canada

### SCOPE
- **Lu Yonglong**  
  China-CAST, China
- **John Samseth** (since Jan 2014)  
  International Union of Pure and Applied Physics, Norway

### UNESCO
- **Gretchen Kalonji**
- **Wendy Watson-Wright** (since April 2014)
  Natural Sciences, UNESCO, France

### Global Environmental Change Programmes

#### IGBP
- **James Syvitski**  
  University of Colorado, USA

#### IHDP
- **Partha Dasgupta**  
  University of Cambridge, UK

#### WCRP
- **Antonio J. Busalacchi**  
  University of Maryland, USA
SC-Future Earth

Chair
Mark Stafford Smith
Commonwealth Scientific and Industrial Research Organisation, Australia

Vice Chairs
Belinda Reyers
Council for Scientific and Industrial Research, South Africa

Melissa Leach
Institute of Development Studies, UK

Members
Bina Agarwal
University of Manchester, UK

Xuemei Bai
Australian National University, Australia

Eduardo Brondizio
Indiana University, USA

Bradley Cardinale
University of Michigan, USA

Sandra Díaz
Universidad Nacional de Córdoba, Argentina

Armin Grunwald
Institute for Technology – Assessment and Systems Analysis, Germany

Heinz Gutscher
University of Zürich, Switzerland

Corine Le Quéré
University of East Anglia, UK

Chiekh Mbow
World Agroforestry Centre (ICRAF), Kenya

Susanne Moser
Research and Consulting, USA

Karen O’Brien
University of Oslo, Norway

Dahe Qin
China Meteorological Administration, China

Caroline Vera
Atmosphere and Ocean Sciences (CIMA) and UMI/IFAECI, Argentina

Youba Sokona
Observatory of the Sahara and the Sahel, Ethiopia

Tetsuzo Yasunari
Hydrospheric Atmospheric Research Center, Japan

Interim Engagement Committee, Future Earth (as of December 2013)

Chair
Robert Tony Watson
Tyndall Center, University of East Anglia, UK

James V. Griffiths
World Business Council for Sustainable Development, Switzerland

Amy Luers
Climate at the Skoll Global Threats Fund, USA

Andrew Revkin
Pace University’s Pace Academy for Applied Environmental Studies, USA

Debra Roberts
Environmental Planning and Climate Protection Department of eThekwini Municipality, Durban, South Africa

Guido Schmidt-Traub
UN Sustainable Development Solutions Network, USA

Farooq Ullah
Stakeholder Forum, UK
Future Earth Engagement Committee (as of November 2014)

Chair
Jairam Ramesh
Member of the Indian Parliament, India

James Fahn
Earth Journalism Network, USA

Vore Gana Seck
Green Senegal, Senegal

Marina Grossi
Brazilian Business Council for Sustainable Development, Brazil

Masayo Hasegawa
Toyota Motor Corporation, Japan

Mario Hernandez
International Society of Photogrammetry and Remote Sensing, Switzerland

Yolanda Kakabadse
WWF, Ecuador

Amy Luers
Climate at the Skoll Global Threats Fund, USA

Tim Payn
Forest Research Institute, New Zealand

Kari Raivio
University of Helsinki, Finland

Debra Roberts
Environmental Planning and Climate Protection Department of eThekwini Municipality, Durban, South Africa

Björn Stigson
Stigson and partners, Sweden

Farooq Ullah
Stakeholder Forum, UK

Scott Vaughan
International Institute for Sustainable Development, Canada

Ruth Wolstenholme
Sniffer, Scotland

DIVERSITAS Secretariat

Anne-Hélène Prieur-Richard
Acting Executive Director

Cornelia Krug
Science officer

Karine Payet-Lebourges
Science Officer

Melina Sakiyama
Science Officer

Béatrice Perceval
Administrative Assistant
## Financial Summary

Statement of income and expenditure
1st January to 31st December 2013

<table>
<thead>
<tr>
<th>INCOME</th>
<th>EUROS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>National contributions</strong></td>
<td></td>
</tr>
<tr>
<td>USA (USGCRC)</td>
<td>596 611</td>
</tr>
<tr>
<td>France (Ministère de la Recherche)</td>
<td></td>
</tr>
<tr>
<td>Germany (DFG, BMBF)</td>
<td></td>
</tr>
<tr>
<td>United Kingdom (NERC)</td>
<td></td>
</tr>
<tr>
<td>The Netherlands (NWO, KNAW)</td>
<td></td>
</tr>
<tr>
<td>South Africa (NRF)</td>
<td></td>
</tr>
<tr>
<td>Norway (RCN)</td>
<td></td>
</tr>
<tr>
<td>Belgium (Belspo)</td>
<td></td>
</tr>
<tr>
<td>Sweden (SSEESS)</td>
<td></td>
</tr>
<tr>
<td>Switzerland (SNSF)</td>
<td></td>
</tr>
<tr>
<td>Argentina (CONICET)</td>
<td></td>
</tr>
<tr>
<td>Austria (BMWF)</td>
<td></td>
</tr>
<tr>
<td>China-Taipei</td>
<td></td>
</tr>
<tr>
<td>Mexico (CONACYT)</td>
<td></td>
</tr>
<tr>
<td>Slovak Republic</td>
<td></td>
</tr>
<tr>
<td><strong>Grants (CBD, ICSU-UNESCO)</strong></td>
<td>101 328</td>
</tr>
<tr>
<td><strong>Other income</strong></td>
<td>338 518</td>
</tr>
<tr>
<td><strong>Benefit from previous years</strong></td>
<td>187 190</td>
</tr>
<tr>
<td><strong>TOTAL INCOME</strong></td>
<td>1 223 647</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EXPENSES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scientific activities</strong></td>
<td>1 040 413</td>
</tr>
<tr>
<td><strong>Communication and publications</strong></td>
<td>10 739</td>
</tr>
<tr>
<td><strong>Operating costs</strong></td>
<td>172 495</td>
</tr>
<tr>
<td><strong>TOTAL EXPENSES</strong></td>
<td>1 223 647</td>
</tr>
<tr>
<td><strong>Mandatory reserve</strong></td>
<td>266 045</td>
</tr>
</tbody>
</table>

**In kind contribution from France**
From MNHN (Muséum National d’Histoire Naturelle): Host of International Secretariat
Acknowledgements

Funding for the activities of DIVERSITAS was provided through core funding and support to specific activities originating from the following:

Academia Sinica, China-Taipei | Agence Nationale de la Recherche - SCION, France | American Museum of Natural History, Department of Ornithology, USA | Association for Tropical Biology and Conservation (ATBC) | Brigham Young University, USA | Center of Excellence for Asian Conservation Ecology (JSPS), Japan | Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET), Argentina | Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq), Brazil | Convention on Biological Diversity | EcoHealth Alliance (ex Wildlife Trust) | Environmental Protection Agency (EPA), USA | Environment Research & Technology Development Fund, Ministry of Environment, Japan | European Commission FP7 | Federal Ministry of Education and Research (BMBF), Germany | Federal Ministry of Education, Science and Culture, Austria | French Foundation for Biodiversity Research – CESAB programme | Fundação de Amparo à Pesquisa do Estado de São Paulo (FAPESP), Brazil | German Centre for Integrative Biodiversity Research Leipzig–Jena-Halle (iDIV) | German Research Foundation (DFG), Germany | Ministries of Agriculture and Environment, The Netherlands | Ministry of Higher Education and Research, France | Muséum National d’Histoire Naturelle (MNHN), France (in-kind support) | National Aeronautics and Space Administration (NASA), USA | National Council on Science and Technology (CONACYT), Mexico | National Institute for Public Health and the Environment (RIVM), The Netherlands | National Institutes of Health (NIH), USA | National Research Foundation (NRF), South Africa | National Science Foundation (USGCRP, NSF-GEO, NSF-BIO), USA | Natural Environment Research Council (NERC), United Kingdom | Netherlands Organisation for Scientific Research (NWO), The Netherlands | Network Forum Biodiversity Research Germany (DIVERSITAS Deutschland) | Research Council of Norway, Norway | Royal Netherlands Society of Arts and Sciences (KNAW), The Netherlands | Royal Society, UK | Slovak Academy of Sciences, Slovak Republic | Stockholm Resilience Centre, Sweden | Swedbio, Sweden | Swedish Research Council Formas, Sweden | Swedish Secretariat for Environmental Earth System Sciences (SSEESS), Sweden | Swiss National Science Foundation (SNSF), Switzerland | The Mars Foundation, USA | University of California - Davis, USA | US National Institute of Health (NIH), USA

DIVERSITAS expresses its gratitude to all of these organisations as well as to the French Muséum National d’Histoire Naturelle (MNHN) for hosting the DIVERSITAS International Secretariat.
## Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABS</td>
<td>Access and Benefit-Sharing</td>
</tr>
<tr>
<td>AHTEG</td>
<td>Ad Hoc Technical Expert Group</td>
</tr>
<tr>
<td>AIMES</td>
<td>Earth System synthesis and integration project</td>
</tr>
<tr>
<td>ATBC</td>
<td>Association of Tropical Biodiversity Conservation</td>
</tr>
<tr>
<td>BC3</td>
<td>Basque Centre for Climate Change</td>
</tr>
<tr>
<td>BMBF</td>
<td>Federal Ministry of Education and Research (Germany)</td>
</tr>
<tr>
<td>BMWF</td>
<td>Bundesministerium für Wissenschaft und Forschung (Austria)</td>
</tr>
<tr>
<td>CAST</td>
<td>Chinese Academy of Space Technology</td>
</tr>
<tr>
<td>CBD</td>
<td>Convention on Biological Diversity</td>
</tr>
<tr>
<td>CBO</td>
<td>Cities and Biodiversity Outlook</td>
</tr>
<tr>
<td>CCAFS</td>
<td>Climate Change, Agriculture and Food Security</td>
</tr>
<tr>
<td>CESAB</td>
<td>Centre de Synthèse et d’Analyse sur la Biodiversité (France)</td>
</tr>
<tr>
<td>CGIAR</td>
<td>Consultative Group on International Agriculture Research</td>
</tr>
<tr>
<td>CNPq</td>
<td>Conselho Nacional de Desenvolvimento Científico e Tecnológico (Brazil)</td>
</tr>
<tr>
<td>CNRS</td>
<td>Centre National de la Recherche Scientifique</td>
</tr>
<tr>
<td>CONACYT</td>
<td>National Council on Science and Technology (Mexico)</td>
</tr>
<tr>
<td>CONICET</td>
<td>Consejo Nacional de Investigaciones Científicas y Técnicas (Argentina)</td>
</tr>
<tr>
<td>COP</td>
<td>Conference Of the Parties</td>
</tr>
<tr>
<td>COSUST</td>
<td>Current Opinion in Environmental Sustainability</td>
</tr>
<tr>
<td>CSIRO</td>
<td>Commonwealth Scientific and Industrial Research Organisation (Australia)</td>
</tr>
<tr>
<td>DEBED</td>
<td>DIVERSITAS ecoHEALTH on Biodiversity and Emerging Diseases</td>
</tr>
<tr>
<td>DEEED</td>
<td>DIVERSITAS ecoHEALTH Economics of Emerging Diseases project</td>
</tr>
<tr>
<td>DFG</td>
<td>Deutsche Forschungsgemeinschaft (Germany)</td>
</tr>
<tr>
<td>EBVs</td>
<td>Essential Biodiversity Variables</td>
</tr>
<tr>
<td>EcoEvol</td>
<td>Eco-evolutionary approaches to understanding and predicting the response of species and ecosystems to climate change Project</td>
</tr>
<tr>
<td>EcoFINDEERS</td>
<td>Ecological Function and Biodiversity Indicators in European Soils</td>
</tr>
<tr>
<td>EID</td>
<td>Emerging Infectious Disease</td>
</tr>
<tr>
<td>ESP</td>
<td>Ecosystem Services Partnership</td>
</tr>
<tr>
<td>EU-COST</td>
<td>European Cooperation in Science and Technology</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organization</td>
</tr>
<tr>
<td>FAPESP</td>
<td>São Paulo Research Foundation (Brazil)</td>
</tr>
<tr>
<td>FRB</td>
<td>Fondation pour la Recherche sur la Biodiversité (France)</td>
</tr>
<tr>
<td>GBIF</td>
<td>Global Biodiversity Information Facility</td>
</tr>
<tr>
<td>GBO-4</td>
<td>Global Biodiversity Outlook 4</td>
</tr>
<tr>
<td>GCP</td>
<td>Global Carbon Project</td>
</tr>
<tr>
<td>GEC</td>
<td>Global Environmental Change</td>
</tr>
<tr>
<td>GECHH</td>
<td>Global Environmental Change and Human Health</td>
</tr>
<tr>
<td>GEO</td>
<td>Group on Earth Observation</td>
</tr>
<tr>
<td>GEO-BON</td>
<td>Group on Earth Observations-Biodiversity Observing Network</td>
</tr>
<tr>
<td>GEOSS</td>
<td>Global Earth Observation System of Systems</td>
</tr>
<tr>
<td>GLORIA</td>
<td>Global Observation Research Initiative in Alpine Environments</td>
</tr>
<tr>
<td>GMBA</td>
<td>Global Mountain Biodiversity Assessment</td>
</tr>
<tr>
<td>GWSP</td>
<td>Global Water System Project</td>
</tr>
<tr>
<td>HarmBIO</td>
<td>Harmonising Global Biodiversity Models Project</td>
</tr>
<tr>
<td>ICSU</td>
<td>International Council for Science</td>
</tr>
<tr>
<td>ICSU ROLAC</td>
<td>ICSU Regional Office for Latin America and the Caribbean</td>
</tr>
<tr>
<td>IGBP</td>
<td>International Geosphere-Biosphere Programme</td>
</tr>
<tr>
<td>IGFA</td>
<td>International Group of Funding Agencies for global change research</td>
</tr>
<tr>
<td>IHDP</td>
<td>International Human Dimensions Programme on global environment change</td>
</tr>
<tr>
<td>IPBES</td>
<td>Intergovernmental Platform on Biodiversity and Ecosystem Services</td>
</tr>
<tr>
<td>IPCC</td>
<td>Intergovernmental Panel on Climate Change</td>
</tr>
<tr>
<td>IPO</td>
<td>International Project Office</td>
</tr>
<tr>
<td>ISSC</td>
<td>International Social Science Council</td>
</tr>
<tr>
<td>IUBS</td>
<td>International Union of Biological Sciences</td>
</tr>
<tr>
<td>IUCN</td>
<td>International Union for Conservation of Nature</td>
</tr>
<tr>
<td>KNAW</td>
<td>Royal Netherlands Society of Arts and Sciences</td>
</tr>
<tr>
<td>LTER</td>
<td>Long Term Ecological Research</td>
</tr>
<tr>
<td>MEA</td>
<td>Millennium Ecosystem Assessment</td>
</tr>
<tr>
<td>MEP</td>
<td>Multidisciplinary Expert Panel (IPBES)</td>
</tr>
<tr>
<td>MIREN</td>
<td>Mountain Invasion Research Network</td>
</tr>
<tr>
<td>MNHN</td>
<td>Muséum National d’Histoire Naturelle</td>
</tr>
<tr>
<td>MoL</td>
<td>Map of Life</td>
</tr>
<tr>
<td>MoU</td>
<td>Memorandum of Understanding</td>
</tr>
<tr>
<td>NASA</td>
<td>National Air and Space Administration (USA)</td>
</tr>
<tr>
<td>NBSAP</td>
<td>National Biodiversity Strategies and Action Plan</td>
</tr>
<tr>
<td>NERC</td>
<td>Natural Environment Research Council (UK)</td>
</tr>
<tr>
<td>NGO</td>
<td>Non Governmental Organisation</td>
</tr>
<tr>
<td>NIES</td>
<td>National Institute for Environmental Studies (Japan)</td>
</tr>
<tr>
<td>NRF</td>
<td>National Research Foundation (S-Africa)</td>
</tr>
<tr>
<td>NSF</td>
<td>National Science Foundation (USA)</td>
</tr>
<tr>
<td>NSF RSN</td>
<td>NSF Research Coordination Network</td>
</tr>
<tr>
<td>NWO</td>
<td>Organisation for Scientific Research (The Netherlands)</td>
</tr>
<tr>
<td>OWG</td>
<td>Open Working Group</td>
</tr>
<tr>
<td>PBL</td>
<td>The Netherlands Environmental Assessment Agency</td>
</tr>
<tr>
<td>RNC</td>
<td>Research Council of Norway</td>
</tr>
<tr>
<td>REFARM</td>
<td>Resilience Framework for Agriculture and Risk Management</td>
</tr>
<tr>
<td>SBAs</td>
<td>Societal Benefit Areas (GEOSS)</td>
</tr>
<tr>
<td>SBSTA</td>
<td>Subsidiary Body for Scientific and Technological Advice</td>
</tr>
<tr>
<td>SBSTTA</td>
<td>Subsidiary Body for Scientific, Technical and Technological Advice</td>
</tr>
<tr>
<td>SC</td>
<td>Scientific Committee</td>
</tr>
<tr>
<td>SCNAT</td>
<td>Swiss Academy of Sciences</td>
</tr>
<tr>
<td>SCOPE</td>
<td>Scientific Committee on Problems of the Environment</td>
</tr>
<tr>
<td>SDGs</td>
<td>Sustainable Development Goals</td>
</tr>
<tr>
<td>SNSF</td>
<td>Swiss National Science Foundation</td>
</tr>
<tr>
<td>SSEESS</td>
<td>Swedish Secretariat for Environmental Earth System Sciences</td>
</tr>
<tr>
<td>UBC</td>
<td>University of British Columbia (Canada)</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environment Programme</td>
</tr>
<tr>
<td>UNEP-WCMC</td>
<td>UNEP World Conservation Monitoring Centre</td>
</tr>
<tr>
<td>UNEP-GEF</td>
<td>UNEP Global Environment Facility</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
</tr>
<tr>
<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
</tr>
<tr>
<td>UNU</td>
<td>United Nations University</td>
</tr>
<tr>
<td>URBES</td>
<td>Urban Biodiversity and Ecosystem Services</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>URCM</td>
<td>Urban and Regional Carbon Management</td>
</tr>
<tr>
<td>USGS</td>
<td>United States Geological Survey</td>
</tr>
<tr>
<td>WCRP</td>
<td>World Climate Research Programme</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organisation</td>
</tr>
<tr>
<td>WMO</td>
<td>World Meteorological Organisation</td>
</tr>
</tbody>
</table>
Getting involved…

The success of DIVERSITAS has been due to the voluntary involvement of scientists and organisations from around the world. The primary means of contributing to DIVERSITAS over the years has been as an individual scientist, as a member of a DIVERSITAS National Committee, through funding, or as a partner in science-policy endeavours.

Now DIVERSITAS activities are merging into Future Earth but a similar collaborative ethos will contribute to the success of Future Earth, with an even larger community, a broader range of social and natural scientific disciplines, and of stakeholders.

As the DIVERSITAS Secretariat is closing on 31st December 2014, for further information and involvement, please contact:

- The relevant Future Earth (ex-DIVERSITAS) Core Projects’ Science Officer (see page 12) for activities related to these projects;
- The GEO BON Secretariat (www.earthobservations.org/geobon.shtml) and GMBA (see page 12) for activities related to observation;
- bioDISCOVERY (see page 12) and ICSU (www.icsu.org) for activities related to assessment (e.g. IPBES);
- Future Earth (see page 5) for science-policy activities (e.g. Convention on Biological Diversity, post 2015 SDGs process);
- Future Earth (see page 5) for matters related to National Committees and Future Earth development.