January/February 2015, #22



WELCOME

Welcome to the first I2S News for 2015! In this issue we have focused on modelling tools and cases.

A particularly exciting development this year is the decision by the US National Science Foundation-funded National Socio-Environmental Synthesis Centre (SESYNC) to issue a call for funding on "Building resources for action-oriented team science through syntheses of practices and theories". More details are provided below and the full call is on the SESYNC website (http://www.sesync.org/opportunities/enhancing-socio-environmental-research-education). This funding provides an opportunity to run a series of meetings addressing research synthesis questions like:

- What core best practices can be identified by analyzing diverse cases of interdisciplinary and transdisciplinary socio-environmental research?
- How have action research, complex systems science, design science, participatory system dynamics, project management, sustainability science, and similar approaches contributed to understanding of, and action on, socio-environmental problems? What are the similarities and differences among such approaches, and how can this guide which approach or combination of approaches to use for different kinds of problems?
- Are there tools, methods, and practices for synthesizing and acting on research that have been developed in population health, education, security, international development, or other focal areas in the private and public sectors that would enhance research and action on socio-environmental problems?

As you can see it's a great opportunity to further develop research integration and implementation practices and to build links across institutions and networks. Participants from all countries are welcome and up to 6 projects will be funded. Please note that funding only covers travel and meeting costs. Gabriele is honoured to have been invited to be the theme leader and will coordinate the pursuits (projects) which are funded. The closing date is March 9, 2015.

Gabriele Bammer and Peter Deane

CONTENTS

Funding Opportunity

 Building Resources for Action-oriented Team Science through Syntheses of Practices and Theories

Featured Tools

- Collaborative Conceptual Modelling
- Decision Making in Complex Socio-ecological Systems: From Cognitive Maps to Agentbased Models
- Modelling as an Integrative Method in Transdisciplinary Research
- ScriptsMap: A Tool for Designing Multi-Method Policy-Making Workshops

Featured Cases

- Drug Policy Modelling Program (DPMP)
- Participatory Agent-based Modelling for Sustainable Agriculture
- System Dynamics: General Model of Company/Organisation Evolution and Staff Training Needs

January/February 2015, #22



Featured Video

• Transdisciplinary Research Heuristics (Christian Pohl)

Featured Approach

• Systems Thinking - Three Short Introductory Videos

Recent LinkedIn Group Posts and Discussions

- Webinars on Implementation Science
- Update from member

Featured Journals

- Journal of Translational Medicine and Epidemiology
- Call for Papers for the Action Learning and Action Research Journal Special Edition on Systemic Approaches to Action Research and Action Learning

Featured Professional Associations

- Hellenic Society for Systemic Studies
- International Centre for Complex Project Management

Featured Conferences

- Science of Team Science 2015 Conference
- Innovations in Collaborative Modeling
- Other Upcoming Conferences

About I2S News

Aims and how to contribute, subscribe and un-subscribe

FUNDING OPPORTUNITY

Building Resources for Action-oriented Team Science through Syntheses of Practices and Theories. Closes March 9, 2015

Details: http://www.sesync.org/opportunities/enhancing-socio-environmental-research-education

Proposals are invited for synthesis projects focused on tools, methods, and other practices applicable to actionable team research on socio-environmental problems. Multiple teams will be supported, and together their syntheses will contribute towards the development of new toolkits, roadmaps, curricula, and other practical advice.

Effective team science is key to finding solutions to socio-environmental problems. Many tools have been developed for integrating ideas, data, and methods across the diverse disciplines involved when researching complex problems. Similarly, practices have been identified that facilitate the linkage of research results with informed policy decisions. Relatively few of these tools and practices have been assessed and optimized for addressing socio-environmental challenges. We invite proposals for synthesis and refinement of the tools and practices of team science from all disciplinary sources for use in socio-environmental applications.

January/February 2015, #22



The National Socio-Environmental Synthesis Center (SESYNC) will fund up to six international teams (up to 12 members each) to meet over two years (approximately four three-day meetings per team) to analyze, evaluate, and synthesize the practices, tools, methods, and strategies of transdisciplinary team science to significantly improve research teams' effectiveness at understanding socio-environmental problems and informing socio-environmental decisions. The focus may be on improving research methods, on educating new generations of researchers, or both.

This call is open to researchers and educators with expertise in all aspects of the practice and scholarship of actionable team research, including diverse areas of environmental and social investigation and other areas that have not traditionally engaged in socio-environmental contexts, such as public health, international development, security, or other research areas. Successful proposals could include participants from a variety of relevant disciplines including environmental science, ecology, social psychology, systemic intervention, political science, organizational management, implementation science, cognitive science, operations research, information science, and computer science.

Purpose

The aim of the synthesis teams to be established under this proposal is to aggregate and synthesize the tools, methods, and other practices used in action-oriented team research as applicable to socio-environmental science. We encourage proposals that address issues across all stages throughout the lifecycle of an interdisciplinary project from problem formulation to approach design, data gathering analysis and synthesis, publication and other dissemination, implementation, and assessment, although individual teams might only work on a subset of these. Many types or combinations of synthesis approaches are possible and many sources of data for aggregation and analysis are appropriate, including diverse case study examples, concepts, methodologies, procedures, protocols, computational applications, or theoretical foundations.

Additional Info

Visit http://www.sesync.org/opportunities/enhancing-socio-environmental-research-education for complete details. Proposals must be received by March 9, 2015, at 5 p.m. Eastern Daylight Time (EDT).

Questions?

For general inquiries, or contacts from individuals who are interested but are not currently part of a team, please contact Gabriele Bammer (<u>Gabriele.Bammer@anu.edu.au</u>) or David Hawthorne (<u>dhawthorne@sesync.org</u>).

FEATURED TOOLS

Collaborative Conceptual Modelling

Newell, B. and Proust, K. (2013). Collaborative conceptual modelling, digital poster #564, from the *First Global Conference on Research Integration and Implementation* in Canberra, Australia, online and at co-conferences in Germany, the Netherlands and Uruguay, 8-11 September, 2013. (Online: http://i2sconference.digitalposter.com.au/posters-list/564).

January/February 2015, #22



This system dynamics-based approach uses "pair-blending of influence diagrams and the development of dynamical models to support focused dialogue". It involves six "co-evolving activities" summarised in the following quiding questions:

- 1. What is the challenge?
- 2. What is the story?
- 3. Can I see how you think?
- 4. What drives system behaviour?
- 5. What are the leverage points?
- 6. Can we have new eyes?

Activities 1-3 are designed to "foster focused dialogue and conceptual integration" and has well-tested protocols. See also a related tool, "Focused dialogue", on the I2S website.

Activities 4-6 are designed to provide better understanding of the dominant dynamics, "identify leverage points for sustainable management action" and "construct scenarios or other narratives that can guide policy making". These methods still require development.

Decision Making in Complex Socio-ecological Systems: From Cognitive Maps to Agent-based Models

El Sawah, S., Guillaume, J. and Filatova, T. (2013). A methodology for eliciting and representing decision making in complex socio-ecological systems, digital poster #747, from the *First Global Conference on Research Integration and Implementation* in Canberra, Australia, online and at coconferences in Germany, the Netherlands and Uruguay, 8-11 September, 2013. (Online: http://i2sconference.digitalposter.com.au/posters-list/747).

Describes the ICTAM method: Interviews, Cognitive maps (individual and collective), conceptual decision models (Time-sequenced and All-encompassing), and agent based Models. Illustrated using a project supporting revision of ground water management in South Australia. Strengths and weaknesses of the method are examined.

Modelling as an Integrative Method in Transdisciplinary Research

Strasser, U. and Vilsmaier, U. (2013). Coupled numerical modelling for inter- and transdisciplinary integration in climate change effect research: examples of interface design, digital poster #800, from the *First Global Conference on Research Integration and Implementation* in Canberra, Australia, online and at co-conferences in Germany, the Netherlands and Uruguay, 8-11 September, 2013. (Online: http://i2sconference.digitalposter.com.au/posters-list/800).

Views integration as having "communicative, social and cognitive" aspects, relating to language, roles and knowledge, respectively. A key element was establishing a "task force", with representatives of the key subgroups, whose role is to "introduce core concepts and methods" from their subgroups and to "communicate agreements and results of the integration process back to the subgroups". The focus of this work is on cognitive integration and three coupling tools: "variables (continuous system states)", "indicators (aggregated system states)" and "thresholds (critical system states)". Choosing variables is important for joint understanding and interfaces between disciplinary models. Indicators structure negotiation on the measurement of effects. Thresholds "are normative and help negotiate values". The method is illustrated using a case examining climate change effects on future natural and artificial snow conditions and hence on tourism and the economy in two regions in the Austrian alps.

January/February 2015, #22



ScriptsMap: A Tool for Designing Multi-Method Policy-Making Workshops

Richardson, G., Andersen, D., Ackermann, F. and Eden, C. (2013). ScriptsMap: A Tool for Designing Multi-Method Policy-Making Workshops, digital poster #589, from the *First Global Conference on Research Integration and Implementation* in Canberra, Australia, online and at coconferences in Germany, the Netherlands and Uruguay, 8-11 September, 2013. (Online: http://i2sconference.digitalposter.com.au/posters-list/589).

Combines system dynamics group modelling and group explorer strategy making to "facilitate the design of multi-method strategy modelling workshops". Consists of:

- Scripts: bits of workshop processes eg., stakeholder mapping, issue mapping, agreeing on key performance variables
- Products: outcomes of scripts, some of which are deliverables
- Arrow paths between scripts and products

Useful for setting agendas and producing deliverables.

For these and more tools, such as

• Guidance for Evidence-Informed Policies about Health Systems: Assessing How Much Confidence to Place in the Research Evidence

See: http://i2s.anu.edu.au/resources/tools

FEATURED CASES

Drug Policy Modelling Program (DPMP)

Ritter, A., Dietze, P., Mazerolle, L., Room, R., Lenton, S., Colebatch, H. and Pascal, P. (2013). Illicit drug policy: A case study of I2S demonstrated in the Drug Policy Modelling Program, digital poster #639, from the *First Global Conference on Research Integration and Implementation* in Canberra, Australia, online and at co-conferences in Germany, the Netherlands and Uruguay, 8-11 September, 2013. (Online: http://i2sconference.digitalposter.com.au/posters-list/639).

DPMP provides policy advice on responses to illicit drug use, often using models. These include cost-benefit analyses (eg., on legalisation of cannabis use), system dynamics models (eg., on estimating unmet demand for opioid pharmacotherapy treatment) and agent-based models (eg., on policing a street heroin market). DPMP also studies the policy process in order to more effectively influence it through research.

Participatory Agent-based Modelling for Sustainable Agriculture

Smetschka, B. and Gaube, V. (2013). Participatory modelling, digital poster #620, from the *First Global Conference on Research Integration and Implementation* in Canberra, Australia, online and at co-conferences in Germany, the Netherlands and Uruguay, 8-11 September, 2013. (Online: http://i2sconference.digitalposter.com.au/posters-list/620)

Demonstrates modelling scenarios and strategies for sustainable agriculture in an Austrian region. This involved gathering mental models of stakeholders, developing shared understanding of system dynamics, fostering exchange and learning, and developing and assessing strategies. An agent-based model was at the core, with many inputs developed using participatory methods. Three scenarios were assessed.

January/February 2015, #22



System Dynamics: General Model of Company/Organisation Evolution and Staff Training Needs

Papaioannou, P. (2013). System dynamics for modeling corporate evolution and implied training needs, digital poster #784, from the *First Global Conference on Research Integration and Implementation* in Canberra, Australia, online and at co-conferences in Germany, the Netherlands and Uruguay, 8-11 September, 2013. (Online: http://i2sconference.digitalposter.com.au/posters-list/784).

Provides a generic model incorporating business growth, personnel transfers, resignations and retirements to calculate training days for different personnel groups. Training includes both new skills and skills maintenance.

FEATURED VIDEO

Transdisciplinary Research Heuristics by Christian Pohl

Transdisciplinary research (of the European sustainability style) is described in this 30 minute video as research that combines knowledge from different disciplines and engages with societal actors:

- 1. to grasp the complexity of a societal problem;
- 2. to take into account the diversity of perceptions that stakeholders and disciplines may have of a problem;
- 3. to link generalised abstract and case-specific knowledge; and,
- 4. to develop knowledge and practices that promote what is perceived to be the common good.

Compared to basic research taking place in the realm of a given discipline, trans-disciplinary projects are an encounter of various realms and their underlying worldviews. For instance, and depending on the project's specific aim and composition, these can involve the natural, medical, engineering or social sciences, the humanities, the private or the public sector or civil society. To appraise, to position and to interrelate the different realms and their underlying worldviews ("worldview-brokering") is what trans-disciplinary research is all about.

Some researchers presume that disciplinary excellence qualifies them for trans-disciplinary encounters, convinced that 'you just have to do it'. This leads to a great deal of re-inventing the wheel. If experiences drawn from researchers and the projects they are involved in are systematically analysed, common challenges can be identified together with useful heuristics that can enable trans-disciplinary encounters. Among those heuristics are:

- To invest substantial time and brain-power in all three stages of trans-disciplinary research: (1) problem framing, (2) problem analysis and (3) bringing results to fruition;
- To design research recursively, i.e. to alternate phases of doing research with phases of critically reflecting on research;
- To start synthesis with problem framing and to understand consensus as one possible form of synthesis;
- To reduce complexity by contextualisation;
- And that there is no jack-of-all-trades trans-disciplinarity.

January/February 2015, #22



This video "Heuristics of Transdisciplinary Research" presented by Christian Pohl was a plenary talk at the First Global Conference on Research Integration and Implementation on 8 September 2013. Watch on YouTube at: http://youtu.be/nx1SNFWkhml.

FEATURED APPROACH

This new resource section here and on the I2S website describes different approaches which bring particular guiding principles to research integration and implementation practices.

Systems Thinking - Three Short Introductory Videos

The following three YouTube videos (each less than 5 minutes long) provide an introduction to systems thinking.

- 1. *A systems story* by BEE Environmental Communication uses love to explain core systems principles: http://youtu.be/rDxOyJxgJeA
- 2. *Systems thinking: an introduction* by Foton Labs compares systems thinking with reductionist analysis, using cars, transportation and the human body as examples: http://youtu.be/AP7hMdnNrH4
- 3. *Peter Senge introduction to systems thinking* by Peter Senge uses a family dynamics analogy: http://youtu.be/eXdzKBWDraM

RECENT LINKEDIN GROUP POSTS AND DISCUSSIONS

The LinkedIn Global Network for Research Integration and Implementation has recently featured:

- Archived and live webinars on Implementation Science:
 https://cyberseminar.cancercontrolplanet.org/implementationscience/. This National Cancer Institute website hosts archived recordings of a range of webinars on research implementation covering training, decision aids, fidelity, etc.
- Jennifer Kaindi advertised positions available in the Global Health Fellows Program II these are now closed.

Other LinkedIn discussion group items have been converted into resources and are provided elsewhere in this News.

FEATURED JOURNALS

Journal of Translational Medicine and Epidemiology

The Journal of Translational Medicine and Epidemiology publishes papers about "recent advances and new developments aiming to accelerate the translation of scientific discovery into new or improved standards of care." Of relevance to I2S are papers about the translation process, especially a 2014 special issue on "Collaboration Science and Translational Medicine." These are open access papers.

• Website: http://www.jscimedcentral.com/TranslationalMedicine/index.php

January/February 2015, #22



- Special issue link: http://www.jscimedcentral.com/TranslationalMedicine/translationalmedicine-spid-collaboration-science-translational-medicine.php
- Impact factor: N/A

Call for Papers for the Action Learning and Action Research Journal - Special Edition on Systemic Approaches to Action Research and Action Learning

"The first issue of ALARj for 2015 will be a Special Issue produced in partnership with the Action Research SIG (Special Integration Group) of the International Society for the Systems Sciences (ISSS)." Contributions are invited from those who have an interest in systemic approaches to action research and action.

- Special issue details:
 - o http://www.alarassociation.org/item/650169
- Journal homepage: http://journal.alara.net.au/index.php/alarj
- Important dates:
 - o Draft abstract or paper due February 7th 2015. Contact: editor@alara.net.au

For these and more journals, such as

- Small Group Research
- World Futures: The Journal of Global Education

See: http://i2s.anu.edu.au/resources/journals

FEATURED PROFESSIONAL ASSOCIATIONS

Hellenic Society for Systemic Studies

"The Hellenic Society for Systemic Studies (HSSS) is a scientific non-profit society with the following goals:

- 1. "the growth and dissemination of methodologies and applications of systemic analysis in science, technology and administration.
- 2. the recognition of systemic analysis in the public sector, private enterprises and organizations of the public and private sector.
- 3. the consolidation of the prestige of a systemic analyst.
- 4. the promotion of research and teaching on systemic analysis in [academic] education and professional training.
- 5. the exchange and distribution of information relative to systemic analysis in Greece and internationally.
- 6. the provision of possibilities to its members for professional and scientific advancement".

The HSSS supports the International Journal of Applied Systemic Studies (IJASS). The HSSS was established in 2003 and is a member of the International Society for the Systems Sciences and International Federation of Systems Research.

• Website: http://www.hsss.gr/eng/index.htm

January/February 2015, #22



International Centre for Complex Project Management

The *International Centre for Complex Project Management* (ICCPM) has a membership program and a LinkedIn discussion group. The focus is on improving the international community's ability to successfully deliver complex projects. "There is a strong emerging body of evidence and research indicating that traditional, linear project management tools and techniques, while still necessary, are insufficient to manage the most complex of today's projects through to successful delivery on time and within costs and performance targets. A primary focus of ICCPM is to work with its partners and the international community to fund, facilitate and conduct applied research that advances knowledge and practice in the management of complex projects. The aim is to share these outcomes with its partners across all industry and government sectors, and with the global community."

ICCPM was established in 2005, was previously known as the *College of Complex Project Managers*, and is an international not-for-profit company "established by Australian, UK and US government bodies and major defence industry corporations".

• Website: https://iccpm.com/

For this and more professional associations & networks, such as

International Society for Ecological Economics

See: http://i2s.anu.edu.au/resources/associations_networks

FEATURED CONFERENCES

Science of Team Science 2015 Conference

"The Science of Team Science (SciTS) is a rapidly growing cross-disciplinary field of study that aims to build an evidence-base and to develop translational applications to help maximize the efficiency and effectiveness of team based research." The SciTS 2015 Conference will bring together thought leaders in the SciTS field, scientists engaged in team-based research, institutional leaders who promote collaborative research, policy makers, and federal agency representatives." The conference "will also highlight the interface of the SciTS field with current hot topics and emerging trends, including diversity in science teams, big data, citizen science, open data, and research networking. The conference program will include invited speakers and plenary sessions in addition to submitted panels, papers and posters."

Although registrations for the conference are required, there will be no registration fee for the 2015 conference.

The conference will be held in Bethesda, Maryland, United States of America, over 2-5 June 2015.

For further details, please see:

- Conference website: http://www.scienceofteamscience.org/
- Call for abstracts: http://www.scienceofteamscience.org/2015-call-for-abstracts
 - o Deadline for submissions: February 12, 2015.
 - Submissions portal: https://easychair.org/conferences/?conf=scits2015

January/February 2015, #22



Innovations in Collaborative Modeling: Addressing Complex Social and Environmental Problems Through Systems Modeling Techniques

"This conference focuses on the use of systems modeling techniques in managing complex social and environmental problems. [The] conference features presentations, demonstrations, and posters pertaining to the use of a variety of quantitative systems modeling techniques to tackle social and environmental problems related to (but not limited to) food systems, natural systems, wildlife management, water, health, transportation, and education. Quantitative systems modeling techniques include, but are not limited to, system dynamics modeling, social network analysis, and agent-based modeling."

The conference will cater for those with experience in modelling and also for those new to systems theory and modelling, including faculty, students or community members. There will also be participatory modeling demonstrations focused on two to three complex problems of relevance to communities alongside standard paper presentations.

The conference will be held in East Lansing, Michigan, United States of America, over 4-5 June 2015.

For further details, please see:

• Conference website: http://modeling.outreach.msu.edu/

Other Upcoming Conferences

Conferences which have not been listed in previous newsletters are marked [NEW].

Interdisciplinarity, Transdisciplinarity and Action Research Methodologies

- 15-17 June 2015, Workshop on Investigating Interdisciplinary Practice: Methodological Challenges, Helsinki, Finland (http://www.helsinki.fi/tint/materials/CfP_ID-Workshop_TINT_UHelsinki_June2015_Poster-1.pdf)
- [NEW] 4-7 November 2015, Action Learning, Acton Research Association (ALARA) World Congress 2015 ALARA 9th Action Learning Action Research and 13th Participatory Action Research World Congress: Collaborative and Sustainable Learning for a fairer world: Rhetoric or Reality? Pretoria, South Africa (http://alarassociation.org/pages/events/alara-world-congress-2015)

Systems, Modelling and Simulation

- 12-13 February 2015, 6th International Conference on Computer Modelling and Simulation, Amsterdam, The Netherlands (http://www.iccms.org/)
- [NEW] 31 March April 3 2015, 8th International Conference on Social Computing, Behavioral-Cultural Modeling, & Prediction (SBP15), Washington DC, United States of America (http://sbp-conference.org/about/)
- [NEW] 19-20 March 2015, 20th Coalition Theory Network Workshop, Venice, Italy (http://www.coalitiontheory.net/content/20th-coalition-theory-network-workshop)
- [NEW] 12-15 April 2015, Symposium on Theory of Modeling and Simulation (within the 2015 Spring Simulation Multi-conference), Alexandria, Virginia, United States of America (http://tms-devs.org/)
- 27-29 April 2015, Systems Engineering and Test and Evaluation Conference (SETE 2015), Canberra, Australia (http://www.sete2015.com.au/)

January/February 2015, #22



- 10-13 May 2015, International Choice Modelling Conference, Austin, United States of America (http://www.icmconference.org.uk/index.php/icmc/icmc2015)
- [NEW] 17-20 May 2015, 10th Annual Systems of Systems Engineering Conference: SoSE Controls, Modelling and Simulation, San Antonio, Texas, United States of America (http://sosengineering.org/2015/)
- 26-29 May 2015, 29th European Conference on Modelling and Simulation (ECMS 2015), Varna, Bulgaria (http://www.scs-europe.net/conf/ecms2015/aims.html)
- [NEW] 4-5 June 2015, Innovations in Collaborative Modeling: Addressing Complex Social and Environmental Problems Through Systems Modeling Techniques, East Lansing, Michigan, United States of America (http://modeling.outreach.msu.edu/)
- [NEW] 12-15 June 2015, 27th European Conference on Operational Research, Glasgow, United Kingdom (http://www.euro2015.org/)
- 14-17 June 2015, Joint International Meeting Canadian Operational Research Society and Institute for Operations Research and the Management Sciences, Montreal, Canada (http://meetings2.informs.org/montreal2015/)
- [NEW] 26-29 June 2014, 8th Chaotic Modeling and Simulation International Conference (CHAOS), Paris, France (http://www.cmsim.org/)
- [NEW] 29 June 3 July 2015, 23rd Conference on User Modeling, Adaptation and Personalization: Contextualizing the World, Dublin, Ireland (http://umap2015.com/)
- 19-23 July 2015, 33rd International Conference of the System Dynamics Society, Cambridge, Massachusetts, United States of America (http://conference.systemdynamics.org/)
- 3-7 August 2015, 59th Meeting of the International Society for the Systems Sciences: Governing the Anthropocene the greatest challenge for systems thinking in practice? Berlin, Germany (http://isss.org/world/node/608)
- [NEW] 7-8 September 2015, UK Systems Society 19th Annual Conference Delivering 'Gaols'? Bristol, United Kingdom
 (http://www.ukss.org.uk/sites/ukss.org.uk/files/docs/UKSS%20Conference%202015%20First%20Call.pdf)
- [NEW] 14-18 September 2015, The 11th Conference of the European Social Simulation Association, Groningen, The Netherlands (http://www.essa.eu.org/)
- [NEW] 22-24 September 2015, YoungOR (Operational Research) 19 Biennial Conference, Birmingham, United Kingdom (http://www.theorsociety.com/Pages/Conferences/YOR19/YOR19.aspx)
- 20-15 October 2015, Systems Thinking in Action Conference, Washington DC, United States
 of America (http://conference.stiatemenos.com/stia2015/)
- 29 November 4 December 2015, Modelling and Simulation Society of Australia and New Zealand Congress, Brisbane, Australia (http://www.mssanz.org.au/modsim2015/index.html)

Team Science and Project Management

- 11-13 May 2015, Project Management Institute (PMI) Global Congress 2015, London, United Kingdom (http://www.pmi.org/Learning/professional-development/Congress-PMI-Global-Congresses/EMEA-2015.aspx)
- [NEW] 2-5 June 2015, Science of Team Science 2015 Conference, Bethesda, Maryland, United States of America (http://www.scienceofteamscience.org/)
- 23-25 July 2015, 10th Annual INGRoup Conference, Pittsburgh, United States of America (http://www.ingroup.net/conference.html)

January/February 2015, #22



Uncertainty, Risk and Decision Making

- 8-10 April 2015, European Sociological Association's (ESA) Risk and Uncertainty Research Network 22 - mid-term conference: Risk, Uncertainty and Transition, Stuttgart, Germany (http://www.sraeurope.org/filehandler.ashx?file=13565)
- 15-17 June 2015, 24th Annual Conference of the Society for Risk Analysis Europe, Maastricht, The Netherlands (http://www.sraeurope.org/#bl3530)
- 19-23 July 2015, World Congress on Risk: Risk Analysis for Sustainable Innovation, Singapore (http://www.sra.org/worldcongress2015)
- [NEW] 16-18 September 2015, 9th International Conference on Scalable Uncertainty Management (SUM 2015), Quebec, Canada (http://www.fernuni-hagen.de/wbs/sum2015_draft/)
- [NEW] 15-17 October 2015, 4th International Symposium on Integrated Uncertainty in Knowledge Modelling and Decision Making (IUKM), Nha Trang, Vietnam (http://www.jaist.ac.jp/IUKM/IUKM2015/)
- 6-9 December 2015, Society for Risk Analysis Annual Meeting, Washington DC, United States of America (http://www.sra.org/events/sra-2015-annual-meeting)

Bridging the Gap from Research to Policy and Practice

- 26-28 May 2015, Global Implementation Conference: Implementation for Impact, Dublin, Ireland (http://globalimplementation.org/)
- [NEW] 25-26 September 2015, 3rd Biennial Society for Implementation Research Collaboration (SIRC): Advancing Efficient Methodologies through Community Partnerships and Team Science, Seattle, Washington, United States of America (http://www.implementationnetwork.com/conferences/sirc-3rd-biennial-conference)

Other (including Sustainability Science)

- [NEW] 14-15 February 2015, 16th Annual Social Enterprise Conference: Intent. Action. Impact, Cambridge, Massachusetts, United States of America (http://socialenterpriseconference.org/)
- 23-24 February 2015, 11th International Conference on Technology, Knowledge, and Society: Big Data and the Politics of Participation in a Digital Age, Berkeley, United States of America (http://techandsoc.com/the-conference/call-for-papers)
- 27-30 May 2015, 7th International Conference for the Humanities, Arts, Science, and Technology Alliance and Collaboratory (HASTAC): Art and Science of Digital Humanities, East Lansing, United States of America (http://www.hastac2015.org/)
- [NEW] 11-14 June 2015, 10th International Conference on Interdisciplinary Social Sciences: Interdisciplinary Approaches to Contemporary Social Change, Split, Croatia (http://thesocialsciences.com/the-conference/)
- 29 June July 2 2015, 8th World Environmental Education Congress: Planet and People -How Can They Develop Together? Hobart, Australia (http://aaee2014.com.au/)
- 30 June 3 July 2015, 11th International Conference of the European Society for Ecological Economics: Transformations, Leeds, United Kingdom (http://www.esee2015.org/)
- [NEW] 20-22 July 2015, 12th International Conference of Engaged Scholars and Practitioners Changing Times: Changing Agenda's, Sydney, Australia (http://www.engagementaustralia.org.au/conference)
- [NEW] 24-26 July 2015, World Future 2015: Make the Future! San Francisco, California, United States of America (http://www.wfs.org/worldfuture-2015)
- [NEW] 12-14 August 2015, 6th Annual VIVO 2015 Conference, Cambridge, Massachusetts, United States of America (http://vivoconference.org/)

January/February 2015, #22



 [NEW] 1-2 October 2015, 7th International Conference on Science in Society: Educating Science, Chicago, Illinois, United States of America (http://science-society.com/the-conference)

ABOUT 12S NEWS

The aim of this newsletter is to provide regular (bi-monthly) updates about new resources added to the Integration and Implementation Sciences website (http://i2s.anu.edu.au/resources). These resources are useful for researchers interested in Integration and Implementation Sciences (I2S), which underpins the investigation and tackling of complex real world problems, by:

- Synthesizing knowledge from different disciplines and stakeholders,
- Understanding and managing diverse unknowns, and
- Providing integrated research support for policy and practice change.

In general, each issue features tools (concepts and methods), case studies and/or approaches relevant to I2S - either a useful compilation or one or more examples of note. We also provide information about journals, professional associations & networks, professional development courses and conferences where researchers can learn from others, report their methodological findings and interact with like-minded peers. The newsletter also reports on discussions in the LinkedIn group "Global Network for Research Integration and Implementation": http://www.linkedin.com/groups/Global-Network-Research-Integration-Implementation-4888295.

12S News is archived at: http://i2s.anu.edu.au/what-i2s/i2s-publications/i2s-news.

Other useful links:

I2S website: http://i2s.anu.edu.au

• I2S on YouTube: https://www.youtube.com/user/i2sTalks

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