Dear colleagues,

My first editorial as Chairman of this Scientific Committee is a very emotional experience. It is a great honor for me to assume the leadership of this SC for the new triennium and would like to wish the highest success to all the members and to the new Secretary Seong-Kyu Kang. I hope that we will be able to serve the Committee in the best way to promote future development in research and prevention. I do not find myself able to communicate in a journalistic style, but I truly believe that this bulletin is a nice way to approach the members of the group. As we have recognized in the latest meetings, communication is a key issue and this newsletter can greatly help in keeping the interest at a high level.

The latest two years have been quite active starting with the 9th International Symposium in Korea and continuing with the ICOH2006 in Milan and the NTOXMET workshop in Brescia, Italy. The presence of our SC was quite strong during ICOH2006, with a good scientific quality of parallel and special sessions. Anders Iregren gave also a very good key lecture covering the history and the future of our discipline. We had a business meeting in Milan and you can read the minutes of the meeting in this newsletter.

One of the most important activities of this SC is training: our colleagues from South Africa are proposing a training program on neurotoxicology and neurobehavioral assessment within the WAHSA project. You can find the details in their note. A letter of appointment as Sc officer from the ICOH president, announced that certain activities are required from the SCs in terms of meetings and outputs in form of publications, position papers and so on. The Declaration of Brescia was an important output from the NTOXMET workshop of last June and you can find it on this issue. The Organizing Committee has spread this document to many international agencies. This is already an important output that was produced in close collaboration with the SC on the Toxicology of Metals. Further work could focus on additional topics: the methods for neurosensory testing, the diagnostic criteria for the solvent related chronic encephalopathy, and an update of computerized neurobehavioral methods. Specific ad hoc group may be formed in the next future to address these important issues, so please do not hesitate to communicate with me and Seong-Kyu if you are willing to contribute.

With my best regards,
Roberto Lucchini
Dear SC members,

It is my pleasure to have a chance to serve as the Secretary of the SCNP under the leadership of Roberto Lucchini from 2006 to 2009.

First of all, I must thank our former Chairperson, Anders Iregren and former Secretary, Roberto Lucchini, for their contribution to the SCNP. They have shown a great achievement in the activities of the SCNP. Their leadership and devotion made the SCNP be one of the very active SC among the 36 SCs of ICOH. On behalf of all SC members, I would like to applaud them for their excellent work to the SCNP.

Since its establishment, the SCNP has enormous accomplishment. The main scientific conferences, the International Symposia on Neurobehavioral Methods and Effects, have been held every three years from continent to continent. The proceedings of the Symposia were published in good peer-reviewed journals. Newsletters have been issued regularly since 2000. SC members developed many advanced neurobehavioral test methods and introduced them at the International Symposia of the SCNP. Close relationships with other SCs or outside ICOH such as INA have also been organized.

I must thank you all SC members for your support to the 9th International Symposium held in Gyeongju, Korea in 2005. I believe that it was a very good meeting not only in scientific communication but also in social communication among SC members. The proceeding will come soon in Neurotoxicology. Thanks again to the authors and reviewers for their contribution.

At the business meeting of the SCNP in Gyeongju, many issues were discussed. One of the main topics we discussed was the communication among SC members. There will be many things to share between scientists to develop new methods, to find new effects and to set up the prevention strategy in the field of NP. However, the geographic distances do not enable us to communicate frequently. The Newsletter is a good communicating methods, but issues only two or three times a year. Thus, a discussion board was open for the mutual communication. Please visit the website. The address is: http://toxneuro.or.kr/zb41pl2_english/zboard.php?id=SCofNTPP.

If members have a problem to enter certain website frequently, we may develop a mailing list which enable us to spread news or information easily to all SC members.

Another problem that the SC has is the low participation rate to the business meeting. As you can see from the minutes of the business meeting, only few SC members participated to the business meeting at the ICOH2006 Congress, although most SC members attended the Congress. I think that two business meetings are very important for the SC members. One is the business meeting during the International Symposium of the SCNP and the other is that during the ICOH congress. The new Secretary cordially asks the SC members to participate to the business meeting during the Symposia and the Congresses. Please, do not miss the business meetings in San Jose in 2008 and in Cape Town in 2009.

The SCNP could not be able to survive without your active participation. Those from the developed countries may have many things to prevent occupational illnesses caused by neurotoxic substances. Those from the developing countries would like to learn their experience. I hope that the SCNP is the right place to exchange information on neurobehavioral methods and neurotoxic effects.

With warm regards,
Seong-Kyu Kang

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Minutes of the Business Meeting
Milan - June 15, 2006

A business meeting of the SCNP was held during the ICOH2006 Congress in Milan, Italy.

Participants:
Anders Iregren  Sweden  SCNP Chairman
Roberto Lucchini  Italy  SCNP Secretary
Seong-Kyu Kang  South Korea  SCNP member
Iman Nuwayhid  Lebanon  SCNP member
Gert Van Der Laan  Netherlands  SCNP member
EunA Kim  South Korea  SCNP member
Natalia Bobko  Ukraine  SCNP member
Rita Bast-Pettersen  Norway  SCNP member
Catharina Wesseling  Costa Rica  SCNP member
Fabrizio Maria Gobba  Italy  SCNP member
Sibel Kiran  Turkey  non SCNP member
Geoff Calvert  USA  non SCNP member

Agenda of the meeting:

a) Procedure for the election of Chair and Secretary: each member of the SCNP can be a candidate for chairmanship and secretariat. Candidacies are discussed and agreed between the Committee members during the official business meetings. In case of alternative candidacies, the SC officers are elected by votes.

b) Definition of the duties of Chair and Secretary:
   a. the two officers participate to the ICOH meetings as representative of the SC. The meetings take place during the ICOH Congresses and between them (mid-term meetings).
   b. they inform the SC members through the bulletin of the SCNP “NeurotoxNews” about the proposal and next initiatives.
   c. they recruit new members of the SCNP and keep the member list updated.
   d. they promote scientific development and contact with other SCs and groups outside ICOH.

c) Procedure and requisites for the enrolment of new members: individuals who are interested in and active in the field of neurotoxicology and behavioural toxicology are welcome to join the SC. According to the ICOH bye-laws, they must be in good standing with the ICOH membership fee. A brief CV and proof of ICOH good standing must be sent to the Chairman and Secretary for evaluation of the candidacy. The SC has recently attracted various new members. The International Symposia are very good occasion for recruiting new members.

d) Description of the current activities of the SCNP for ICOH2006: a keynote lecture from the current Chairman, four special sessions and two parallel sessions were being organized during the ICOH Congress, whereas the NTOXMET satellite workshop was scheduled right after ICOH2006 in Brescia, Italy.

e) Update of the next 10th International Symposium in Costa Rica: Catharina Wesseling is actively proceeding with the organization in collaboration with the EPICOH SC. The
Symposium is planned in a way that there will be an interesting overlapping time on Neuro-epidemiology between the consecutive meetings of the two SCs. A website is available at: [http://www.una.ac.cr/intconf08](http://www.una.ac.cr/intconf08)

f) Future initiatives: further proposals are being evaluated, including:

- criteria for the evaluation of sensory functions like smell and vision,
- re-definition of solvents related chronic encephalopathy,
- further collaboration with the SC on the Toxicology of Metals (SCTM) including a large meeting on manganese toxicity and risk assessment
- a joint conference with INA (International Neurotoxicity Association) has been suggested. We concluded that it not possible to do that in a near future without changing the cycle of official conference, because INA has an official meeting every two years and the next meeting will be held in 2007. However, a joint conference may be considered in 2011, when the 11th NBME Symposium and the 12th INA meeting will be held.
- training activity on neurobehavioral methods for the Southern African Development Community (SADC) participants, within the Swedish funded initiative WAHSA (Work and Health in Southern Africa) [http://www.nioh.ac.za/Collaborations/collab_wahsa.htm](http://www.nioh.ac.za/Collaborations/collab_wahsa.htm)

Appointment of new Chair and Secretary: the procedure for the appointment of the new Chair Roberto Lucchini and new Secretary Seong-Kyu Kang just started with the transmission of the decision by the SCNP on these two members to the Presidency of ICOH. The current Chairman Anders Iregren was therefore passing the ball to the new officers and the business meeting was closed with a warm applause and for the marvellous work that Anders has done for 12 years serving as Secretary and Chair of the SCNP.
The Work and Health Programme in Southern Africa (WAHSA) is a collaborative initiative to build capacity in occupational health in the Southern African region. Funded by the Swedish International Development Agency, SIDA, WAHSA draws together various Southern African centres of expertise in occupational health in partnership with the National Institute of Public Health and the National Institute of Working Life in Sweden to build capacity in the region to address the major occupational health challenges in the region. It is a similar biregional development project to SALTRA, set up to promote occupational health capacity in Central America. WAHSA is planned to run for 12 years and has three main focus areas – silica/silicosis, informal sector, and pesticides – representing the main hazards associated with the dominant economic activities affecting the largest numbers of people in the region.

Each sub-project is organised around a twinning arrangement of a South African and Southern African centre. In the case of pesticides, the Occupational and Environmental Health Research Unit at the University of Cape Town, a WHO Collaborating Centre for Occupational Health, is twinned with the Tropical Pesticides Research Institute in Arusha, Tanzania. The sub-project, titled “Action on Pesticides” has as its goals the enhancement of knowledge and improved surveillance for pesticide exposures and health impacts, development and dissemination of effective pesticide safety and training materials, implementation of interventions on pesticide use, agricultural policies and pesticide registration, and the building of a strong regional network for information exchange and consultation. Part of the networking involves development of a regional Resource Centre at the TPRI and offering capacity-building in occupational health for researchers and practitioners in the region.

Work to date has included the development of methods for better surveillance for acute pesticide poisoning, assessment of exposures in flower farming activities in Tanzania, development/evaluation of posters and a cartoon comic for pesticide safety, regional policy interventions and training to practitioners and scientists.

One particularly successful activity to date was the hosting of a grant-writing workshop in May 2006 attended by 17 participants from 6 countries in the region, who brought their research ideas to develop further in a structured training setting. A number of these proposals sought to explore neurotoxic outcomes of pesticide exposure, so one of the follow up activities planned by WAHSA for 2007 is to host a short training course on neurobehavioural assessment in occupational epidemiology for Southern African researchers. It is hoped that the Scientific Committee will be able to assist through mobilising members to assist with the training, identifying potential partners for collaborative research and supporting local researchers in trying to address risks posed by unsustainable pesticide policies, and the unsafe distribution and use of pesticides in the region.

More information on WAHSA can be found at URL: http://wahsa.net

Leslie London (UCT) and Vera Ngowi (TPRI)
Helsinki 30 August 2006

To the Chairpersons and Secretaries of ICOH Scientific Committees
RE: Assignments for ICOH Scientific Committees 2006-2009

Dear Colleague,

My warmest congratulations for your appointment as an Officer for the ICOH Scientific Committee. Best wishes for success in the Leadership of the Committee, which constitutes one of the key activities of ICOH.

May I inform you that the ICOH Officer responsible for the overall coordination of the Scientific Committees is Dr. Marilyn Fingerhut, PhD (MAF2@CDC.gov) to whom you should according to the Bye-Law 5 present the Work Plan for your Committee's activity for the triennium 2006-2009 by 30 September 2006.

According to the ICOH policy the minimum standard for each Committee activity should be at least one Scientific Meeting between the ICOH World Congresses.

We would also like to see at least one concrete scientific output during the triennium. The output should be produced on the key theme relevant to the Scientific Committee's research area. (The selection of the theme is up to the Committee and the output could take the form of State of the Art Report, Congress Proceedings, Position Paper, ICOH Guidelines, Fact Sheet, ICOH statement or other information output based on best scientific evidence and ICOH Members practical experience.)

The Committee or some of the Committee Members may already have such an output available and it can be used for the preparation of the ICOH output provided the intellectual property rights are duly observed and the Committee quality assurance is made. In the preparation of outputs collaboration with other scientific bodies and institutions with independent position and high reputation is welcomed.

You will be provided with a new guideline for ICOH Scientific Committees before the end of the year.

We would like to emphasize that the ICOH Code of Ethics is followed in all ICOH activities. You will also receive a form of Transparency which shall be filled by each officer of ICOH.

In case you have any questions or need for more information, please do not hesitate to contact Dr. Fingerhut.

Yours sincerely,

Jorma Rantanen
President of ICOH
Name of Committee: Neurotoxicology and Psychophysiology
Chairman: Roberto Lucchini (Italy)
Secretary: Seong-Kyu Kang (South Korea)
Website URL: http://www.icohweb.org/committees/neuro.asp

Focus and aim of committee: Focus of the SC is research in the field of neurotoxicology, neurobehavioral, neurosensory and neurodevelopmental toxicology.
Aim of the SC is to provide scientific updates on the adverse effects due to occupational and environmental exposure to neurotoxic agents, and on the most suitable methods for their detection. A substantial effort of the SC is directed towards establishing collaboration with scientists in the newly industrialized and developing countries. This is being achieved both with the organization of international symposia in these areas and with a direct involvement of the scientists within the SC’s activities.

ACTIVITIES AND OUTPUTS IN 2006-2009

2006:
Mini-symposia at the ICOH 28th Congress in Milan, Italy
The SCNP organized 4 mini-symposia at the ICOH 28th Congress on
1. Chronic solvent-related encephalopathy: Screening and recognition of an occupational diseases.
2. Recent findings on neurotoxic effects of metals.
3. Acute and chronic exposure to industrial chemicals and sensory perception in workers.
4. Neurodegeneration and metal exposure case-control studies on Alzheimer and Parkinson’s diseases supported by ISPESL (National Institute of Occupational Safety At Work, Rome).

Joint Conference with other SC of ICOH in Brescia, Italy
The SCNP organized the satellite workshop, NTOXMET (Neurotoxic Metals: Lead, Mercury and Manganese. From Research to Prevention) on June 17-18, 2006 in Brescia, Italy in collaboration with the SC on Toxicology of Metals of ICOH.

2007:
Officers’ Mid-term Meeting (January 2007)

Special symposium at the International Meeting of INA in Asilomar California, USA
The SCNP is organizing a special symposium on NEUROBEHAVIORAL TESTING IN HUMAN RISK ASSESSMENT at the 11th Biannual Meeting of International Neurotoxicology Association (INA), which will be held in Asilomar, CA USA on June 10-15, 2007.
Seminar for training neurobehavioral test methods in South Africa
Training activity on neurobehavioral methods is being planned for Southern African Development Community (SADC) participants, within the Swedish funded initiative WAHSA (Work and Health in Southern Africa)
http://www.nioh.ac.za/Collaborations/collab_wahsa.htm

2008:
The official scientific conference of the SCNP in San José, Costa Rica
The SCNP is organizing the 10th International Symposium on Neurobehavioral Methods and Effects in Occupational and Environmental Health in San José, Costa Rica, on June 7-9. The International Symposium will be held in connection with the 20th International Conference of the SC on epidemiology of ICOH, EPICOH, which will be held in same place on June 5-7, 2008.

Mini-symposia at the 18th World Congress on Safety and Health at Work in Seoul, Korea
The SCNP will organize a mini-symposium on neurobehavioral methods and effects at the 18th World Congress on Safety and Health at Work, which will be held on June 29- July 2, Seoul Korea by ILO, ISSA, and KOSHA.
http://www.kosha.or.kr/eng/english.htm

2009:
Mini-symposia at the ICOH 29th Congress in Cape Town, South Africa
The SCNP will organize several mini-symposia on neurobehavioral methods and effects, which will be held in March Cape Town, South Africa. Contacts are already taking place for a seminar in collaboration with the SC on the Toxicology of Metals

Publications, Guidelines, Position Papers, etc.:
The Proceeding of the 9th International Symposium of the SCNP will be published with Neurotoxicology in 2006.
The Declaration of Brescia was issued after the NTOXMET workshop in Brescia, in 2006 and is available on the conference website www.ntoxmet.it. The proceedings from the workshop will be published in a special issue of the American Journal of Industrial Hygiene.
Guidelines on reference methods for neurobehavioral testing are being planned within the SCNP.
A book for Occupational Neurotoxic diseases in the world is being planned to be published by the SCNP.

Means of Communication within Committee: (newsletter, website, mailing list, forum etc.):
The bulletin NeurotoxNews is published quarterly and posted on the SC website http://www.icohweb.org/committees/neuro.asp
Discussion Board for the SCNP
http://toxneuro.or.kr/zb41pl2_english/zboard.php?id=SCofNTPP

Collaborative Activities with other ICOH Committees:
Joint activity with the SC on the Toxicology of Metals, the EPICOH and the Pesticides Committee

Collaborative Activities with other (Non-ICOH) Organizations:
International Neurotoxicology Association (INA) http://www.neurotoxicology.org/
### List of scientific committee members:

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On 17-18 June 2006, the Scientific Committee on Neurotoxicology and Psychophysiology and the Scientific Committee on the Toxicology of Metals of the International Commission on Occupational Health (ICOH) convened an International Workshop on Neurotoxic Metals: Lead, Mercury and Manganese – From Research to Prevention (NTOXMET) at the University of Brescia. Scientists and physicians from 27 nations participated.

Data were presented for each of the three metals on environmental sources, fate and distribution; human exposure; clinical, subclinical and developmental neurotoxicity; epidemiology; risk assessment; and prospects for prevention. Ongoing and future studies were described and discussed.

For each of the metals, initial recognition of neurotoxicity occurred in the context of high-dose exposure. For example, lead poisoning was first recognized in miners, smelters and type setters, methylmercury poisoning in inhabitants of the fishing community of Minamata, and manganese poisoning in miners and ferroalloy workers. Subsequent development of more sensitive and sophisticated analytical instruments led to the recognition of subclinical toxicity and developmental neurotoxicity at progressively lower levels of exposure. In each case the extent of toxicity was much greater than initially appreciated and the size of the affected population much larger. Many decades typically elapsed between the initial recognition of neurotoxicity and the initiation of programs for prevention. Early warnings were frequently ignored and even actively resisted. The historical observation that long delays had typically elapsed before the initiation of prevention prompted extensive discussion at the Workshop about the need to develop more effective strategies. From this discussion, a series of recommendations emerged on future directions for research and prevention of the neurotoxicity of metals.

At the closing session of the International Workshop at Brescia, the following recommendations on the Prevention of the Neurotoxicity of Metals were adopted by consensus:

1. **Intensified attention must be paid to early warnings of neurotoxicity.** Clinical observations or toxicological data suggesting the existence of neurotoxicity – including subclinical and developmental toxicity - must be taken very seriously. Such observations should prompt consideration of prudent preventive action.

2. **All uses of lead including recycling should be reviewed in all nations** and uses contributing to environmental and human exposures, such as uses in toys, paint, water pipes, building materials, solder, electronics, medications and cosmetics ended. The transfer of these products from one country to another should also be avoided. This approach has been adopted successfully in the EU and needs to be extended worldwide.

3. In particular, **tetraalkyllead must be eliminated without delay from the gasoline supplies of all nations.** The removal of organic lead from gasoline has produced declines of >90% in population mean blood lead levels in industrially developed nations, and this success is now being repeated in some of the developing nations. This action represents one of the great public health triumphs of the late 20th century and needs urgently to be extended to all nations.

4. **Current exposure standards for lead need urgently to be reduced.** Current standards were established many years ago and do not reflect recent advances in scientific knowledge about toxic effects at levels of exposure below these standards. The Brescia Workshop recommends that:

   • **For children**, the action level, which triggers community prevention efforts to reduce exposure sources,
should be immediately reduced to a blood lead concentration of 50 μg/L in nations worldwide. This level is proposed as a temporary level that may need to be revised further downward in future years as new evidence accumulates on toxicity at still lower blood lead levels. This reduction of the blood lead action level will reduce the incidence of subclinical neurotoxicity in children as well as the delayed consequences of developmental toxicity.

- **For industrial workers**, the standard for lead in blood should be reduced immediately to 300 μg/L in nations worldwide. Additional consideration should be given to further reducing this standard to 200 μg/L and below in the years ahead. This reduction in exposure standard will reduce the incidence of subclinical neurotoxicity and other toxic effects during the working life and responds to new documentation presented at the Workshop that long-term lead exposure increases the risk of dementia in later life.

- **For female industrial workers of reproductive age**, the standard for lead in blood should be reduced immediately in nations worldwide to the lowest obtainable, preferably to 50 μg/L, a level consistent with the recommended blood lead standard for children. Lead passes freely across the placenta from the maternal to the fetal circulation to enter the developing brain where it causes prenatal brain injury. This recommended reduction in maternal lead exposure will reduce the incidence of fetal neurotoxicity in the offspring of women workers.

5. **Exposures of pregnant women and women of reproductive age to methylmercury need to be reduced to prevent subclinical fetal neurotoxicity.** Evidence is strong that prenatal exposure to methylmercury causes fetal neurotoxicity. Consumption of fish with high mercury concentration by pregnant women is the primary route of exposure. More than 50% of the mercury in fish may be of industrial origin. Strategies for reducing mercury exposure recommended by the Brescia Workshop are the following:

- All industrial uses, recycling processes and other industrial input of mercury into the environment should be reviewed in all nations, and non-essential uses should be eliminated and releases controlled. This approach has been successfully introduced in the EU and is actively promoted by the United Nations Environmental Programme.
- Mercury emissions from coal-fired power plants need to be curtailed.
- All chloralkali plants worldwide should be urgently converted to alternative technologies that are not based on mercury, and mercury stores and wastes must be safely deposited.
- Gold mining with mercury must be controlled and enforced with safety guidelines, and alternative technology should be promoted.
- Dietary advisories should be developed as effective, culturally appropriate means to limit childbearing women’s consumption of fish contaminated with methylmercury. Taking into account nutrient contents and availability, healthy diets should be recommended with fish and seafood containing minimal levels of contamination.

6. **Exposures of pregnant women and young children to manganese need to be reduced to prevent subclinical neurotoxicity.** Important new data on the neurotoxicity of manganese were presented at Brescia. In adult workers, these data suggest that manganese produces subclinical neurotoxicity at levels of exposure below those that produce parkinsonism. In children, evidence from two recent epidemiological studies suggests that exposure to manganese in early life causes subclinical developmental neurotoxicity.

7. **The addition of organic manganese compounds to gasoline should be halted immediately in all nations.** The data presented at the Brescia Workshop raise grave concerns about the likelihood that addition of manganese to gasoline could cause widespread developmental toxicity similar to that caused by the worldwide addition of tetraalkyllead to gasoline. In light of this information, it would be extremely unwise to add manganese to gasoline.

8. **Exposure standards for manganese need to be reconsidered**

The drinking water standards for manganese in many countries are not based on health concerns, and those that are do not protect against developmental neurotoxicity resulting from exposures in utero and in early postnatal life. The current occupational exposure standard may not protect workers against subclinical neurotoxicity. The value for air manganese concentration in inhalable/total dust of 100 μg/m³ should be adopted to protect the workers from prolonged exposure and consequent long-term effects.
9. **Economic impacts of the neurotoxicity caused by metals must be considered**

The costs of toxicity may be far greater than the costs of pollution control. The major contributor to these costs is damage to the developing central nervous system. Such injury can result in lifelong loss of intelligence and motor capacities, permanent psychological disturbances and disruption of behavior. These effects can produce reduction of economic productivity, and when this reduction occurs widely across a society, the resulting economic impacts are great. The costs of pollution recur annually in each exposed birth cohort, adults and elderly while the costs of control are one-time costs.

10. **Need is great for continuing research into the neurotoxicity of metals**

Recent studies of neurotoxicology of each of the metals discussed at the Brescia Workshop inform us that we can anticipate harmful effects of increasingly lower levels of exposure to metals previously considered safe as larger studies using sensitive measures of exposure and outcome, and better statistical techniques are conducted.

a. For lead, mercury, and manganese, much remains to be learned about the delayed consequences of developmental toxicity and the prolonged exposure to low levels in the adults, as possible causes of neurodegeneration. This research is critical to guide both future research in metals as paradigms of neurotoxic pollutants and targeted programs of prevention.

b. Prospective cohort studies from birth are needed, parallel to study on adults and elderly with a retrospective assessment of exposure.

c. Neurotoxicological research, including research on developmental neurotoxicology, is needed on metals not considered at the Brescia Workshop – arsenic and aluminum in particular, and on interactions with essential elements, pesticides and persistent organic pollutants.

d. Research is needed into genetic and other factors that contribute to susceptibility to metal toxicity.

e. Research is needed into various determinants of the rearing environment, including the social setting, that can modify the exposure indicators to neurotoxic metals and subsequently the magnitude of neurodevelopmental effects.

f. Research is needed into the potential consequences of global warming for human exposures to neurotoxic metals – especially mercury.

### Signatories (Organizing Committee of the NTOXMET workshop)

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(*): The views presented in the Declaration is the consensus reached by the participants of the workshop and do not necessarily reflect the decisions or stated policies of the affiliation organizations.
NTOXMET SCIENTIFIC PROGRAM

Saturday June 17, 2006

Welcome from ICOH SCs on N&P and SCTM, and NIEHS
From Lead to Manganese through Mercury: lessons for prevention

1st Session: Lead
The politics of lead toxicology in the United States and the tragic consequences for children
Lead neurotoxicity in children: knowledge gaps and research needs
Low-level lead toxicity: the ongoing search for a threshold
The past, present and future of childhood lead poisoning
CNS effects of lead in adults: new evidence from longitudinal studies of neurobehavioral function and structural MRI
Lead neurotoxicity as results from an Italian multicenter study

2nd Session: Mercury
Overview of mercury neurotoxicity
Mechanisms of disposition of mercury
Exposure biomarkers for methyl mercury
Maternal fish consumption, biomarkers of mercury exposure and neurodevelopment in a cohort of Italian newborns
Inorganic mercury and neurotoxicity
Neurophysiological evidence of methyl mercury neurotoxicity

Sunday June 18, 2006

Economic implications of metal neurotoxicity

3rd Session: Manganese
Characterization of welding fumes and their neurotoxic effects
The epidemiology of Parkinsonism in welders
Dose effects of Manganese levels and neurological and neuropsychological function in San Francisco Bay Bridge welders
Biomarkers of Manganese Exposure: An Update from Human, Animal Model, and In Vitro Studies
Long-term sequelae of Manganese exposure in former alloys workers
Manganese, arsenic and cognitive function in young children
Parkinsonism from environmental exposure in the vicinities of Italian ferroalloy plants

4th Session: Manganese risk assessment
The global experience with lead in gasoline and the lessons we should apply to the use of MMT
Canadian Health Risk Assessment for Inhaled Manganese
International Meetings

International Conference on Food Contaminants and Neurodevelopmental Disorders
December 3–5, 2006, Valencia, Spain
http://www.fundacioncac.es/eng/fundacion/actividades/actividadesficha.jsp?idActividad=64

Prenatal Programming and Toxicity
www.pptox.dk

Nordic Culture Center
Torshavn, Faroe Islands
20-24 May, 2007

Conference deadlines:
Abstract deadline:
31 January, 2007
Early-bird registration:
1 April, 2007

Costa Rica
EPICOH-2008
20th International Symposium on Epidemiology in Occupational Health
June 5-7, 2008
&
NeurOEH-2008
10th International Symposium on Neurobehavioral Methods and Effects in Occupational and Environmental Health
June 7-9, 2008
http://www.una.ac.cr/intconf08

18th World Congress on Safety and Health
http://www.safety2008korea.org/eng/index.jsp

INA 11th Biannual Meeting
June 10 to 15, 2007
Asilomar Conference Center
Pacific Grove, California, USA
http://www.cevs.ucdavis.edu/Cofred/Public/Aca/ConfHome.cfm?confid=250

The newsletter
This newsletter is compiled quarterly by Roberto Lucchini (Chair of the SCNP) lucchini@med.unibs.it and Seong-Kyu Kang (secretary of the SCNP) skk@kosha.net
Contributions are most welcome, preferably as .rtf files via E-mail. Feel free to contact us for any questions or suggestions related to contributions and contents of this bulletin!