Conference program (overview)

Tuesday, September 9, 2003

4.00 pm  Opening registration
4.00 pm  Opening speakers bureau
6.00 pm - 7.30 pm  Meeting scientific committee/session chairs
10.00 pm  Closing registration
10.00 pm  Closing speakers bureau

Wednesday, September 10, 2003

Focus: Health & Epidemiology

7.00 am  Opening registration
7.00 am - 8.15 am  Speakers bureau open
7.30 am - 8.30 am  Continental breakfast
8.30 am - 8.40 am  Conference opening
8.40 am - 10.00 am  Session A: Health Effects I
10.00 am - 10.15 am  Coffee-break
10.15 am - 11.45 am  Session B: Health Effects II
11.45 am - 12:45 pm  Lunch
11.45 am - 2.00 pm  Speakers bureau open
12.45 pm - 1.45 pm  Poster session 1
2.00 pm - 3.20 pm  Session C: Health Effects III
3.20 pm - 3.35 pm  Coffee break
3.35 pm - 5.00 pm  Session D: Health Effects IV
5.00 pm - 6.00 pm  Poster session 2
5.00 pm - 8.00 pm  Speaker bureau open
6.00 pm  Closing registration
6.00 pm - 7.10 pm  Dinner
7.30 pm - 8.30 pm  Plenum discussion: Health and Microbes

Thursday, September 11, 2003

Focus: Environmental Assessment

7.00 am  Opening registration
7.00 am - 7.45 am  Speakers bureau open
7.00 am - 8.00 am  Continental breakfast
8.00 am - 10.00 am  Session E: Assessment I
10.00 am - 10.15 am  Coffee break
10.15 am - 12.00 pm  Session F: Assessment II
12.00 pm - 1.00 pm  Lunch
SPECIAL EVENT: Grand Rounds with moderator Mary Darcy, producer of “The Health Show” and “51%”, WAMC National Productions
“Medical issues and patients perspective: Caring for the patient while medical science is in development”

Conference closing & remarks
Detailed conference program

Wednesday, September 10, 2003

7.30 Conference opening
Eckardt Johanning (Conference Chair and Director)

8.40 – 9:45 Session A: Health effects I – epidemiological research
Session chairs/monitors:
Torben Sigsgaard
Carl-Gustaf Bornhag

Aa. Summary presentation, Health effects I (Patho-mechanism)
Torben Sigsgaard

Ab. Summary presentation, Health effects I
Dampness in buildings as a risk factor for health effects – Multidisciplinary review of the literature on dampness in buildings and health effects, NORDAMP and EUROEXPO
Carl-Gustaf Bornhag

A1. Effects of repair of school mold problems and teachers’ health
Riita-Liisa Patovirta, Tuula Husman, Ulla Haverinen, Mika Toivola, Marjut Reiman, Mikko Vahteristo, Jukka Uitti, Hannu Tukiainen, and Aino Nevalainen

A2. Assessment of exposure to indoor environmental factors for an infant cohort at risk for asthma

A3. Cluster of autoimmune disease in association with microbial exposure in moisture damaged buildings
Tuula Husman, J. Pelkonen, and R. Luosujärvi

9.45 – 10.00 Coffee break

10.00 – 11.45 Session B: Health effects II – Toxicology and Neurological Effects
Session chairs/monitors:
Harriet Ammann
Manfred Gareis
Ba. **Summary presentation, Health effects II**  
Harriet Ammann

Bb. **Summary presentation, Health effects II**  
Manfred Gareis (Mycotoxin analytical issues and public health prevention)

B1. **Cytotoxicity of different actionmycetes isolated from building materials**  
A. Mehrer, Wolfgang Lorenz, Manfred Gareis, C. Trautmann, R.M. Kroppenstedt, and E. Stackebrandt

B2. **Human and animal pathology of inhalation trichotheccene mycotoxicosis**  
William A. Croft, Bonnie Jastromski, Amanda Croft, and Henry Peters

B3. **Sick building syndrome in water damaged buildings: Generalization of the chronic biotoxin associated illness paradigm to indoor toxigenic-fungi exposure**  
Ritchie C. Shoemaker, H. Kenneth Hundell, and Dennis House

B4. **Visual contrast sensitivity: a sensitive indicator of neurotoxicity for risk assessment and clinical applications**  
H. Kenneth Hudnell, Dennis E. House, and Ritchie C. Shoemaker

B5. **Clinical evaluation of suspected mold neurotoxicity**  
Raymond Singer

B6. **Cognitive impairment associated with exposure to toxic mold: a replication of previous findings**  
Wayne A. Gordon, Joshua Cantor, Heather Charatz, Janis Breeze, and Eckardt Johanning

B7. **The chronicity of cognitive impairment associated with exposure to toxic mold**  
Wayne A. Gordon, Joshua Cantor, Heather Charatz, Teresa Ashman, and Eckardt Johanning

B8. **Association of molds indoor with neurobehavioral and pulmonary impairment**  
Kaye Kilburn

11.45 – 12.45 Lunch

12.45 – 1.45 **Poster session 1**  
Presenters A1 – B8
2.00 – 3.20  **Session C: Health effects III – Health assessment & case studies**
Session chairs/monitors:
Tuula Husman
Eckardt Johanning

Ca.  **Summary presentation, Health Effects III: Health Effects of moisture damage associated microbes**
Tuula Husman

C1.  **Laboratory signs of sickness due to mold metabolites in indoor environment**
Anja Tiilikainen, Irmeli Heikkinen, Leila Mikkilä, and Aini Bloigu

C2.  **Assessing the allergic potential of indoor air fungal contaminants**
Marsha D.W. Ward, Michael E. Viana, Yongjoo Chung, Najwa Haykal-Coates, Lisa B. Copeland, Steven H. Gavett, and MaryJane K. Selgrade

C3.  **Alleged mercury poisoning symptoms in sewage treatment workers likely linked to bacteria, fungal, and endotoxin exposure**
Chris van Netten and Karen Bartlett

C4.  **Clinical evaluation of surviving twin after fatal case of pulmonary hemosiderosis following Stachybotrys chartarum and other indoor mold product exposure – first case control study**
Gary J. Ordog, Jonathan Wasserberger, and Dennis Hooper

C5.  **Epidemiological investigation of a mold-contaminated “sick” building**
James Craner, Stuart Alderman, and Neil Willits

C6.  **Symptomatic improvement after cessation of mold exposure: clinical experience in environmental and occupational health**
Iris G. Udasin, Howard Lu, Elisheva Rovner, and Howard Kipen

C7.  **Clinical Experience with exposure to fungi and laboratory testing**
Eckardt Johanning and Raymond Luhrman

3.20 – 3.35  **Coffee break**

3.35 – 5.00  **Session D: Health Effects IV – Experimental research**
Session chairs/monitors:
Maija-Riitta Hirvonen
Dorr Dearborn
Da. **Summary presentation, Health effects IV. Cytotoxicity and inflammatory responses induced by moldy house microbes**
   Maija-Riitta Hirvonen

D1. **Nasal effects of VOC-ozone reaction products: Do reactions with ozone enhance irritation due to MVOCs?**
   Robert Laumbach
   Robert J. Laumbach, N. Fiedler, C. Weschler, C.R. Gardner, J. Zhang, P. Lioy,
   T. Fan, K. Kelly-McNeil, and H.M. Kipen

D2. **Occular effects in humans by experimental exposure to different types of dust**
   Zhiwei Pan, Lars Molhave, Søren K. Kjørgaard, Torben Sigsgaard, Jan-Erik Juto,
   Kjell Andersson, and Göran Stridh

D3. **The synergistic interaction between microbial metabolites and actionbacteria Streptomyces californicus**
   Kati Huttunen, J. Pelkonen, U. Nuutinen, Kristian Fog Nielsen, and Maija-Riitta Hirvonen

D4. **Nasal lavage in the evaluation of upper airway inflammation in three different exposure environments**
   Marjut Roponen

D5. **Effects of spores of two Stachybotrys chartarum strains on pulmonary surfactant formation, in vitro**
   Thomas G. Rand, and J.E. Scott

D6. **Inflammatory lung responses in mice after intra-tracheal exposure to spores of two Stachybotrys chartarum strains**
   Thomas G. Rand, B. Hudson, L. Gregory, and J. Flemming

D7. **Comparison of the acute effects of S. chartarum and other indoor molds on the lungs of infant rats**
   Iwona Yike, Ronald Walenga, and Dorr G. Dearborn

C8. **Glucan spiking of office dust increases nasal inflammation in volunteers**
   Bonløkke, J-E Juto, G. Stridh, and H. Lofstedt

5.00 – 6.00  **Poster session 2**
   Presenters C1 – D8

6.00 – 7.00  **Dinner**

7.30 – 8.30  **Plenum discussion: Health and Microbes**
   Introductions by Torben Sigsgaard, Harriet Ammann, Tuula Husman, and
   Maija Riita Hirvonen
Thursday, September 11, 2003

8.00 – 10.00  **Session E: Assessment I – Assessment methods and field findings**

Session chairs/monitors:
Aino Nevalainen
Phil Morey

Ea. **Summary presentation, Assessment I**
Exposure in moldy buildings
Aino Nevalainen

E1. **Development of a gel-trap system coupled with PCR for Nasal effects of VOC-ozone**
Development of a gel-trap system coupled with PCR for microorganisms environmental detection: application to *Mycobacterium tuberculosis* complex
Valerie Bex, C. Vadrot, L. Bordenave, A. Mouillesseaux, V. Joseph, and F. Squinazi

E2. **Home dust: an efficient and affordable tool for the assessment of microbial contamination**
Paul Widden, Tonia DeBellis, Charles Deblois, Claude Mainville, and Marie-France Pinard

E3. **Comparison of different mold detection methods in mold damaged buildings**
Hans Schleibinger, H. Samwer, D. Laußmann, A. Nickelmann, D. Eis, and H. Rueden

E4. **Microbial indoor air quality in office buildings with central air conditioning installations in Belgium. An easy tool for a fungal quality evaluation**
Camille Chasseur, Sébastien Gofflot, and Nicole Nolard

E5. **Microbial indoor air quality in office buildings with central air conditioning installations in Belgium. An easy tool for a bacterial quality evaluation**
Camille Chasseur, Sébastien Gofflot, V. De Maertelaer, and Nicole Nolard

E6. **Comparison of PVC cassettes versus vacuum bags for collection and enumeration of culturable filamentous fungi in settled dust**
Brad Prezant

E7. **Assessment of mold sources in the indoor environment**
Satheesh Kumar Sivasubramani, Tiina Reponen, and S.A. Grinshpun

E8. **Evaluation of bacterial and fungal indoor air contamination using a preventative approach and an alternative bacterial identification method**
Sara Bonetta, Silvia Bonetta, Simonetta Sampò, Sabrina Mosso, and Elisabetta Carraro
E9. Wall relative humidity: A simple and reliable index for predicting Stachybotrys chartarum infestation in dwellings
Sandrine Boutin-Forzano, Carmel Charpin-Kadouch, Henri Dumon, Nadia Bennedjai, and Denis Charpin

E10. Comparison of mold, allergen and endotoxin exposure among residential, academic and commercial buildings
Cynthia M. Lange, W. Elliot Horner, and Phil Morey

E11. The Natural Distribution of MVOC (Microbially Produced Volatile Organic Compounds) in Buildings without Mold Infestation
Reinard Keller

10.00 – 10.15 Coffee break

10.15 – 12.15 Session F: Assessment II – Field findings (continued) and mycology
Session chairs/monitors:
Anna-Liisa Pasanen
Claude Mainville

Fa. Summary presentation, Assessment I: Sampling: a neglected part of building investigations and microbial exposure assessment
Anna-Liisa Pasanen

F1. Airborne allergens, bacteria, and fungi in 100 office buildings: Study, sampling and database design and selected results from the BASE study
Derek G. Shendell, Feng C. Tsai, Janet M. Macher, and Laureen Burton

F2. Comparison of fungal air sampling in water damaged buildings vs. base buildings and outdoors
Michael S. Andrew, Phil R. Morey, and B.K. Ligman

F3. Shared air: examining the contribution of mold from home crawl spaces to home interiors
Wayne Thomann and Marie Lynn Miranda

F4. Modeling the equilibrium spore load for a building
John C. Banta and James Holland

F5. Physical factors and distribution of fungal contamination in a high rise building
Herman Sabath and Eric Shapiro

F6. Release of Aspergillus versicolor fragments and spores from contaminated surfaces
Seung-Hyun Cho, Sergey Grinshpun, Mikhail Yermakov, and Tiina Reponen
F7. Micro-particles from fungi
   Anne Mette Madsen, J. Kildeso, and O.M. Poulsen

F8. Methods for detecting indoor bacteria producing substances toxic to human cells
   Maria A. Andersson, Elina Jääskeläinen, Camelia Appetroaie, Douwe Hoornstra, Vera Teplova, and Mirja Salkinoja-Salonen

F9. [POSTER ONLY] Multidisciplinary Survey of a Microbial Contaminated Complex of Residential Apartments
   Herman Sabath

12.00 – 1.00 Lunch

1.00 – 2.00 Poster session 3
   Presenters E1 – F9

2.15 – 3.55 Session G: Assessment III - Mycology
   Session chairs/monitors:
   Robert Samson
   Ken Dillon

Ga. Summary presentation, Assessment III - Fungal identification of indoor molds: current methods and new developments
   Robert Samson

Gb. Summary presentation, Assessment III
   Ken Dillon

G1. Gypsum amendment in nutrient medium enhances the growth of Stachybotrys chartarum
   Anna-Mari Pessi and Auli Rantio-Lehtimäki

G2. Nutrient and pH demands of Streptomycetes isolated from indoor environments
   Ulla Lignell, M. Kontro, Marja-Riita Hirvonen, and Aino Nevalainen

G3. The microbial interactions between Stachybotrys chartarum and Streptomyces californicus
   Piia Penttinen M.M. Keinänen, M. Toivola, Kati Huttunen, J. Pelkonen, and Maija-Riita Hirvonen

G4. Methods to classify environmental samples based on mold analysis by QPCR
   Richard A. Haugland, Manju Varma, Larry Wymer, Teija Meklin, and Steve Vesper
G5. Qualitative identification of Meruliporia incrassate using real time polymerase chain reaction (real time PCR)
King-Teh Lin, De-Wei Li, Derrick A. Dennis, Ray C. Woodcock, and Chin S. Yang

G6. A new ecological niche for the pathogenic yeast, Cryptococcus neoformans var. gattii, in a temperate climate zone
Karen H. Bartlett, Murray Fyfe, Laura MacDougall, Craig Stephen, and Sarah Kidd

G7. Individual exposure assessment in residents near large scale composting sites
Caroline E.W. Herr, A. zur Nieden, J. Bünger, N.I. Stilianakis, and Th.F. Eikmann

3.55 – 4.10 Coffee break

4.10 – 5:15 Session H: Assessment IV – Mycology (continued)
Session chairs/monitors:
Linda Stetzenbach
Ed Olmsted

Ha. Summary presentation, Assessment IV
Linda Stetzenbach

H1. Cross-reactivity patterns of monoclonal antibodies against Aspergillus versicolor and their implications for the development of antibody-based monitoring techniques for fungi
Detlef Schmechel, Janet P. Simpson, and Daniel M. Lewis

H2. Characterization of fungal flora from moisture damaged building material by molecular methods
Miia Viikari, H. Rintala, and L. Paulin

H3. Fungal enzymes in indoor dust
Anne Mette Madsen and H. Würtz

H4. Fungal growth enhancement and solubilization ability on calcareous building materials
Anna-Mari Pessi, Minna Rekola, and Auli Rantio-Lehtimäki

H5. Evaluation of airborne data for small sample sizes: Results from PCR field validation study, and its incorporations into data assessment
David Kahane

H6. [POSTER ONLY] Rapid detection and quantitation of fungal spores from dust samples using real-time PCR
Jyoti Keswani, M. Kashon, and B. Chen
5.15 – 5.30  Refreshment break

5.30 – 6.30  **Poster session 4**
Presenters G1 – H6

6.30 – 7.30  **Plenum discussion: Assessment and Field Studies**
Introductions by Anna-Liisa Pasanen, Linda Stetzenbach, Aino Nevalainen, and Ken Dillon

7.30 – 9.30  **Reception/buffet, Hall of Springs, Saratoga Springs**

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**Friday, September 12, 2003**

8.00 – 9.00  **Session I: Transitional Countries**
Session chairs/monitors:
Nceba Gqaleni
Leila Brickus

Ia.  **Summary presentation**
Nceba Gqaleni

I1.  The indoor environment and allergy as potential stressors in Durban hospitals, South Africa
A. Shadwell, Nceba Gqaleni, and L. Schlebusch

Ajay Gansan, Nceba Gqaleni, and J.E. Ehiri

I3.  Heterogeneity in microbial exposure in schools in Sweden, Poland and Jordan revealed by analysis of chemical markers
Loay Wady, Asem Shehabi, Bogumila Szponar, Christina Pehrson, Yezhou Sheng, and Lennart Larsson

I4.  Fungi surveys in tropical southeastern Brazil
Leila Brickus, M F Costa, J M Machado, and J C Moreira

9.00 – 10.25  **Session J: Remediation**
Session chairs/monitors:
Phil Morey
Ken Ruest
Ja. **Summary presentation: Remediation**
   Phil Morey

J1. **A critical review of mold remediation standards**
   Mike McGuiness

J2. **The effect of construction site dust on mold clearance sampling**
   David Brinkerhoff and Phil Morey

J3. **Clearance protocols and the valuation of an electronic nose for mold contaminated structures**
   Stephen C. Wilson, W.H. Holder, R.F. Johnson, I.A. Andriychuk, Michael D. Larrañaga, and D.C. Straus

J4. **Assessment and remediation of mold contamination in fan coil units of a 341 suite residential condominium**
   Christine White

J5. **A model for economic decision making in indoor air quality**
   Michael D. Larrañaga, M.G. Beruvides, H.W. Holder, S.C. Wilson, and D.C. Straus

10.25 – 10.40  Coffee break

10.40 – 12.20  **Session K: Prevention and Control**
   Session chairs/monitors:  
   Laura Kolb  
   Claude Mainville

Ka. **Summary presentation: Remediation**
   Laura Kolb

Kb. **Summary presentation: Prevention and control**
   Claude Mainville

K1. **Biological assessment focusing on mold**
   Micheline Sedlar and Robert Douglas

K2. **A building microbiology database**
   Adnan Uzunovic, Karen Bartlett, Bill Deacon, and Randy Urbanowski

K3. **Impact of ventilation design on fungal proliferation in a school HVAC system**
   Brenda E. Barry, Timothy M. Lockhart, and David S. Jessup
K4. Mold identification and control strategies in a Canadian training complex
   Lan Chi Nguyen Thi, C. Kerr, and J. Johnson

K5. Risk assessment of bioaerosols in indoor environments: current paradigms and evolving concepts
   R. Vincent Miller and Harriet Ammann

K6. Evaluating the success of implemented IEQ management plans for the prevention of microbial manifestations within HVAC systems in a high-rise building
   Jaclyn Dispensa, Katherine Wilde, Steve Hart, and Jon Wybar

K7. Sustained fungal control through interior finish performance requirements
   Olaf C.G. Adan, M.M. Sanders, and Robert A. Samson

12.30 – 1.30 Poster session 5 Presenters I1 – K7
   Lunch-buffet

1.30 – 2.15 Plenum discussion
   Introductions by Nceba Gqaleini, Phil Morey, and Laura Kolb

2.15 – 2.30 Refreshment break

2.30 – 4.30 Grand Rounds: “Medical issues and patients history: providing best medical care while medical science is in development”
   Moderator: Mary Darcy, producer “The Health Show”, WAMC National Productions

   Dorr Dearborn, Michael Gray, Michael Harbut, Tuula Husman, Eckardt Johanning, Vincent Marinkovich, and patients

   Conference closing & remarks
   Eckardt Johanning