VII International Potsdam Symposium on Tick-borne Diseases (IPS-VII) 2003

Scientific Programme Committee
Jochen Süß, Olaf Kahl, Peter Kimmig

Secretariat
Gabriele Restle, Susanne Schulze

Scientific Programme

Thursday, March 13, 2003

10.00 – 12.30 Registration, mounting of posters

12.30 Opening
Dr. Manfred Lückemeyer (Acting Director of the Federal Institute for Risk Assessment)
Dr. Carola Reimann (Member of the German Bundestag)
Dr. Jochen Süß (Conference Chair)

Is the Incidence of Tick-Borne Diseases on the Increase in Europe?
Moderators: Sarah Randolph and Olaf Kahl

Oral presentations

12.45 – 13.05 S. Randolph (Oxford, UK):
Evidence that climate change has caused ‘emergence’ of tick-borne diseases in Europe?

13.05 – 13.20 R. Zell (Jena, Germany):
Global climate changes and the emergence/reemergence of infectious diseases

13.20 – 13.35 F. Strle (Ljubljana, Slovenia):
Human granulocytic Ehrlichiosis (HGE) in Europe

13.35 - 13.50 Discussion

13.50 – 14.00 A. Bormane, R. Ranka, A. Duks, I. Lucenko, K. Salmina (Riga, Latvia):
Natural foci of tick-borne diseases (TBD) and epidemiological situation in Latvia during the last decade

14.00 – 14.10 P. Zeman, C. Benes (Prague, Czech Republic):
A TBE ceiling in Central Europe has moved upwards during the last 30 years: possible impact of global warming?

14.10 – 14.20 M. Daniel, V. Danielova, B. Kriz (Prague, Czech Republic):
An attempt to elucidate increased incidence of tick-borne encephalitis and shift to higher altitude in the Czech Republic

14.20 – 14.30 B. Kriz, C. Benes, V. Danielova, M. Daniel (Prague, Czech Republic):
Socio-economic conditions and other anthropogenic factors influencing tick-borne encephalitis incidence in the Czech Republic
14.30 – 14.40  J. Süß, C. Schrader, N. Wohanka (Berlin, Passau, Germany): Tick-borne encephalitis in Germany – Epidemiological data, development of risk areas and virus prevalence in engorged and unengorged ticks

14.40 – 15.05  Discussion

15.05 – 16.35  Break and Poster Session
Moderators: Peter Kimmig and Klaus-Peter Hunfeld

16.35 – 16.45  E. I. Korenberg (Moscow, Russia): Problems in the study and prophylaxis of mixed infections transmitted by ixodid ticks


16.55 – 17.05  K.-P. Hunfeld, A. Lambert, H. Kampen, S. Albert, C. Epe, A. M. Tenter, V. Brade (Frankfurt, Bonn, Hannover, Germany): Serologic evidence for Babesia infections in tick-infested humans in midwestern Germany

17.05 – 17.15  A. N. Alekseev, H. V. Dubinina, O. V. Jushkova (St. Petersburg, Russia): First report on the compatibility of seven tick-borne pathogens in Ixodes persulcatus (Acarina, Ixodidae)

17.15 – 17.30  Discussion

17.30 – 17.40  I. Takashima, D. Hayasaka, T. Mizutani, H. Kariwa (Sapporo, Nagasaki, Japan): Tick-borne encephalitis in Japan


17.50 – 18.00  M. Zahler-Rinder, W. Beck, F. Krux, S. Geiger (Munich, Germany): Biodiversity in canine babesiae: molecular and epidemiological investigations

18.00 – 18.15  Discussion

18.45  Bustransfer and further discussions in the Pub and Brewery “Alter Fritz” Berlin Tegel (close to the hotels Sorat and Borsigturm)
Friday, March 14, 2003

09.30 Oral presentations

ECOLOGY OF TICK-BORNE DISEASES
Moderators: Jeremy Gray and Gerold Stanek

9.30 – 9.40
B. Pichon, D. Egan, M. Rogers, J. S. Gray (Dublin, Ireland):
Reservoir host identification by analysis of host-seeking ticks

9.40 – 9.50
G. Khanakah, E. Kocianova, V. Vyrostekova, J. Rehacek, M. Kundi, G. Stanek (Vienna, Austria; Bratislava, Slovakia):
Geographical and seasonal variation in detecting *Borrelia burgdorferi* sensu lato in rodents of north eastern Austria

9.50 – 10.00
*Borrelia burgdorferi* LuxS/AI-2-mediated quorum sensing

10.00 – 10.10 Discussion

Prophylaxis and vaccination
Moderators: Christian Kunz and Egon Marth

10.10 – 10.20
H. J. Ehrlich, B. G. Pavlova, S. Fritsch, E. M. Poellabauer, A. Loew-Baselli, F. Maritsch, F. Dorner, P. N. Barrett (Vienna, Austria; Kehl, Germany):
Randomized, phase II, multicenter dose-finding studies of a modified tick-borne encephalitis vaccine in children: Evaluation of safety and immunogenicity of two vaccinations with FSME-IMMUN® “new”

10.20 – 10.30
A. Loew-Baselli, S. Fritsch, B. G. Pavlova, E. M. Poellabauer, P. Harmacek, M. Krammer, F. Dorner, R. Konior, P. N. Barrett and H. J. Ehrlich for the FSME-IMMUN Adult Study Group (Vienna, Austria; Krakow, Poland):
Safety and immunogenicity of FSME-IMMUN® “new” vs. Encepur® in adults

10.30 – 10.40
J. Beran, R. Chlibek, P. Douda, D. Gniel, O. Zent (Hradec Kralove, Ceske-Budejovice, Czech Republic; Marburg, Germany):
Long-term immunity after vaccination against tick-borne encephalitis with ENCEPUR® using the rapid vaccination schedule

10.40 – 10.50
TBE booster immunisation in adults - first experience with Chiron’s new tick-borne encephalitis (TBE) vaccine

10.50 – 11.10 Discussion

11.10 – 11.40 Break
Moderators: Reinhard Wallich and Veera Vasilenko

11.40 – 11.50
E. Marth, B. Kleinhappl, S. Jelovcan (Graz, Austria):
Stimulation of the immune system by different TBE-virus vaccines
11.50 – 12.00  
K. Zwiauer, S. Ertl (St. Pölten, Austria):  
TBE-vaccine monitoring in Austria – results of a post-marketing sentinel project

12.00 – 12.10  
M. Labuda, A. Trimmell, M. Ličková, M. Kazimirová, P.A. Nuttall (Bratislava, Slovakia; Oxford, United Kingdom):  
An alternative to standard vaccination: Immunization with tick salivary antigens prevents tick-borne encephalitis virus infection of Balb/c mice

12.10 – 12.25  
J. Tsao, B. Brei, D. Fish (New Haven, CT, USA):  
Decreasing tick-borne disease risk in the US by intervening in the natural cycle: lessons from the woods thus far

12.25 – 12.40  
R. Wallich, M. Simon (Freiburg, Heidelberg, Germany):  
Lyme disease vaccine in the US and Europe: public and medial disputes discredit a well-founded and most successful protection strategy

12.40 – 12.50  
State-of-the-art serological techniques for detection of antibodies against Tick-borne encephalitis virus

12.50 - 13.05  
Discussion

13.05 – 14.45  
Lunch-Break and Poster Session

LYME BORRELIOSIS: IMMUNOLOGY, DIAGNOSTICS, AND THERAPY; B. BURGDORFERI S. L. STRAIN DIFFERENTIATION
Moderators: Bettina Wilske and Volker Brade

14.45 – 14.55  
P. Kraiczy, J. Hellwage, C. Skerka, M. Kirschfink, V. Brade, P. F. Zipfel, R. Wallich (Frankfurt, Jena, Heidelberg, Germany):  
Immune evasion of *Borrelia burgdorferi*: expression of complement regulator-acquiring surface proteins contributes to complement resistance in the human host

14.55 – 15.05  
U. Schulte-Spechtel, G. Lehnert, G. Liegl, V. Fingerle, C. Heimerl, B. Johnson, B. Wilske (Munich, Germany; Fort Collins, USA):  
Significant improvement of the recombinant *Borrelia* IgG immunoblot for serodiagnosis of early neuroborreliosis

15.05 – 15.15  
Discussion

15.15 – 15.25  
D. Hassler, M. Schnauffer, H. Ehrfeld, E. Müller (Heidelberg, Kraichtal, Karlsruhe, Germany):  
Disappearance of specific immune response after successful therapy of chronic Lyme borreliosis

15.25 – 15.40  
V. Fingerle, H. Michel, G. Hettche, C. Hizo-Teufel, B. Wilske (Munich, Germany):  
*Borrelia burgdorferi* s. l. OspA-types are widely spread in Bavaria, but show distinct local patterns

15.40 – 15.50  
Discussion
OTHER TOPICS
Moderator: Hans Dautel

15.50 –16.00  
T. J. Naucke, C. Schmitt (Bonn, Germany):  
Is leishmaniasis becoming endemic in Germany?

16.00 –16.10  
H. Dautel (Berlin, Germany):  
Test systems for tick repellents

16.10- 16.20  
Discussion

16.20  
Final remarks and closing ceremony

Farewell reception
Poster sessions

**IS THE INCIDENCE OF TICK-BORNE DISEASES ON THE INCREASE IN EUROPE?**

**P 1**
G. Caruso (Belluno, Italy):
TBE (Tick-borne encephalitis) in Italy

**P 2**
M. Daniel, B. Kriz, V. Danielova, J. Kolar (Prague, Czech Republic):
Atlas of tick-borne encephalitis in the Czech Republic; predictive maps of high risk areas and tick-borne encephalitis cases distribution

**P 3**
G.N. Leonova, V.G. Borisevich, E.V. Pavlenko N.V. Kulakova, S.I. Belikov, D. Gniel (Vladivostok, Russia):
Tick-borne encephalitis in the south of the Russian Far East

**P 4**
M. A. Rieger, M. Nübling, V. Fingerle, W. Wangerin, B. Wilske, F. Hofmann (Wuppertal, Freiburg, Munich, Germany):
Human granulocytic ehrlichiosis – a biological hazard in forestry and agricultural workers in southwestern Germany?

**EPIDEMIOLOGY OF TICK-BORNE DISEASES**

**P 5**
E. Fedorov (Kharkiv, Ukraine):
Tick-transmitted diseases in the Ukraine

**P 6**
O. N. Grishaeva, A. V. Popovsky, M. P. Grishaev, V. I. Ofitserov (Koltsovo, Novosibirsk region, Russia):
Titration of *Borrelia burgdorferi* sensu lato in selected *Ixodes persulcatus* on the territory of western Siberia, Novosibirsk region

**P 7**
L. P. Kolchanova, T. F. Stepanova, V. N. Orlov, (Tyumen region, Russia):
Tick-borne encephalitis and *Ixodes* tick-borne borrelioses mixed infection in the Tyumen region

**P 8**
K. Stepanova (Tyumen region, Russia):
Mixed infections issue: Ixodid tick-borne borrelioses and opisthorchiasis in western Siberia

**P 9**
Distribution of soft ticks and their infection with *Borrelia* in the Hamadan province, Iran

**P 10**
R. Komitova, M. Murdjeva, E. Aleksandrov (Plovdiv, Sofia, Bulgaria):
*Dermacentor marginatus* and erythema migrans

**ECOLOGY OF TICK-BORNE DISEASES**

**P 11**
A. Zore, T. Trilar, E. Ružič-Sabljić, T. Avšič-Županc (Ljubljana, Slovenia):
*Borrelia burgdorferi* sensu lato isolated from engorged *Ixodes ricinus* ticks infestating birds in Slovenia
A. Pawelczyk, M. Ogrzewalska, I. Zadrożna, E. Siński (Warsaw, Poland): The zoonotic reservoir for *Borrelia burgdorferi* sensu lato in the district of Mazury Lakes, the North East part of Poland

A. N. Alekseev (St. Petersburg, Russia): Alternation between spirochaete and cystic forms of the borreliosis agent may exist in humans and in the tick vector

V. V. Nefedova, E. I. Korenberg, N. B. Gorelova, Y. V. Kovalevskii (Moscow, Russia): Studies on the transovarial transmission of *Borrelia burgdorferi* sensu lato in the *Ixodes persulcatus* tick

S. Steuber, A. Abd El-Rady, P.-H. Clausen (Berlin, Germany): PCR-RFLP: A potential technique to identify blood meal donors in vector arthropods

S. Stuen, L. M. Schouls, I. van de Pol, M. Petrovec, T. Moum (Sandnes, Norway; Bilthoven, The Netherlands; Ljubljana, Slovenia): Genetic variants of *Anaplasma phagocytophilum* in sheep in Norway

N. V. Rudakov, S. N. Shpynov, I. E. Samoilenko, M. A. Tankibaev (Omsk, Karaganda, Russia): Ecology, epidemiology and genetics of spotted fever group rickettsiae and new data of their study in Russia and Kazakhstan


T. Yun, T. Batanova, L. Matveev, A. Ilyichev, N. Tikunova (Koltsovo, Russia): Cloning and sequencing of the V-regions of protective murine monoclonal antibodies against tick-borne encephalitis virus

T. Batanova, T. Yun, A. Ilyichev, N. Tikunova (Koltsovo, Novosibirsk region, Moscow, Russia): Human miniantibodies against tick-borne encephalitis virus

G. M. Ignatyev, A. V. Atrasheyskaya, M. S. Vorob’eva (Koltsovo, Novosibirsk region, Moscow, Russia): Cytokines activity upon experimental tick-borne encephalitis immunisation

E. Maritz, H. Schmolck, I. Hellwig, R. Korinthenberg (Freiburg, Germany): Neurological sequelae in children and adolescents after tick-borne encephalitis

L. Stjernberg, J. Berglund (Malmö, Karlskrona, Öland, Sweden): The colour of clothes and tick attachment

LYME BORRELIOSIS: IMMUNOLOGY, DIAGNOSTICS, AND THERAPY

G. Göttner, U. Schulte-Spechtel, B. Wilske (Munich, Germany): Analysis on the heterogeneity of the immunodominant surface protein VlsE among the three European genospecies of Borrelia burgdorferi sensu lato

H. Hofmann, I. Lorenz, E. Magyar, V. Helbl, H. Thüring-Nahler (Munich, Planegg, Germany): Diagnostic value of a new C6 and C10-peptid ELISA for the serodiagnosis of early Lyme borreliosis - comparison to the European two step protocol

I. Müller, V. Brade, G. Stanek, E. Straube, H.-J. Hagedorn, C. Schörner, F. Mühlschlegel, K.-P. Hunfeld (Frankfurt, Jena, Germany; Vienna, Austria): Diagnostic quality of Lyme disease serology: lessons from the German proficiency testing program established in 1999

P. Eissfeller, D. Wassenberg, B. Kraemer, C. Perchermeier, E. Soutschek (Martinsried, Germany): Species-specific diagnosis of neuroborreliosis

K. E. Kisand, M. Utt, K. V. Kisand, R. Uibo, T. Prükk (Tartu, Estonia): Serological description of Estonian patients with Lyme disease, the comparison with control sera from Estonians and Laplanders from North-Sweden

M. Kondrusik, S. Pancewicz, J. Zajkowska, S. Grygorczuk, R. Świerzbiińska, T. Hermanowska-Szpakowicz (Białystok, Poland): Chosen proinflammatory cytokines (TNF-alfa, interleukins L-6 and IL-8) release assay in the supernatant of neutrophils taken from patients with Lyme arthritis stimulated by antigens of three Borrelia burgdorferi strains

S. A. Pancewicz, J. M. Zajkowska, T. Hermanowska-Szpakowicz, M. Kondrusik, R. Świerzbiińska (Białystok, Poland): Concentration of IFN-γ, IL-6, IL-12 and IL-15 in serum of patients with Neuroborreliosis

S. A. Pancewicz, J. M. Zajkowska, T. Hermanowska-Szpakowicz, M. Kondrusik, R. Świerzbiińska (Białystok, Poland): Concentration of IFN-γ, IL-6, IL-12 and IL-15 in cerebrospinal fluid of patients with Neuroborreliosis

M. Leschnik, G. Kirtz, R. Skerlak, P. Ludwig (Vienna, Austria): Cross-reactivity of leptospiral antibodies in Borrelia western blot in acute stage of leptospirosis in dogs but not in leptospiroly vaccinated dogs

P. Kraiczky, S. Burg, C. Hanssen-Hübner, V. Brade, A. Schmidt, K.-P. Hunfeld (Frankfurt, Germany): Variability of protein expression pattern in Borrelia burgdorferi cultivated at increasing concentrations of penicillin and doxycycline
P 35  K.-P. Hunfeld, P. Kraiczy, T. A. Wichelhaus, R. Rödel, V. Brade (Frankfurt, Germany):
    In vitro ketolides are more active than are macrolides and azalides against the spirochaete Borrelia burgdorferi

P 36  J. M. Zajkowska, T. Hermanowska-Szpakowicz, A. Ustymowicz, E. Tarasów (Białystok, Poland):
    Neuroborreliosis: Proton (1H) MR spectroscopy in 12 cases

P 37  J. M. Zajkowska, T. Hermanowska-Szpakowicz, S. A. Pancewicz, M. Kondrusik, S. Grygorczuk (Białystok, Poland):
    Acute encephalopathy in a patient with chronic cutaneous form of Lyme disease, acrodermatitis chronica -case study

BORRELIA BURGDORFERI S.L. STRAIN DIFFERENTIATION

P 38  B. Steil, W. Dorn (Jena, Germany):
    Co-infection in ticks in selected habitats in Thuringia/Germany

    Borrelia quantification and strain differentiation by a novel single-run real-time PCR

P 40  S. A. Rudakova, N. V. Rudakov, N. K. Tokarevich, Yu. V. Andreychuk, V. N. Kulikov (Omsk, St. Petersburg, Russia):
    The new data about genotyping of tick-borne borreliae in the Asian part of Russia

P 41  M. S. Aires, M. S. Nuncio (Aquas de Moura, Portugal):
    Borrelia burgdorferi sensu stricto in biological samples in Portugal

    Comparison of plasmid profiles of Borrelia burgdorferi sensu lato strains

P 43  L. Ciceroni, S. Ciarrocchi, A. Petrucca, G. Caruso, G. Bertiato, C. Zasio, A. Ciervo (Rome, Belluno, Italy):
    Characterization of Borrelia burgdorferi sensu lato strains by pulsed–field gel electrophoresis and arbitrarily primed-PCR

OTHER TOPICS

P 44  I. Uspensky (Jerusalem, Israel):
    Human toxaemia after attachment of Ixodes redikorzevi (Acari: Ixodidae) females in Israel

P 45  A. Estrada-Peña (Zaragoza, Spain):
    Recent changes in abiotic variables for the development of Ixodes ricinus in Europe

P 46  O. Kahl, A. Marangoni, V. Sambri, O.B. Göbel, B. Hammer (Berlin, Germany; Bologna, Italy):
    Risk of transmission of Borrelia afzelii and unknown field-collected borreliae from Ixodes ricinus nymphs to the host after incomplete vector tick feeding