



12th European Meeting on Complement in Human Disease

Programme

5–8 September, 2009
Visegrád, Hungary

12th European Meeting on Complement in Human Disease

Institutional Supporters:



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European Journal of
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GREETINGS

We are delighted to welcome you to the 12th European Meeting on Complement in Human Disease in Visegrád.

The conference series “Complement in Human Disease” started from Balatonfüred, Hungary in 1986. After 23 years we have the honour again, to host this successful meeting.

It is our honour to welcome every colleague who came from all over the world. Approximately 250 participants registered and 150 abstracts had been submitted.

We are looking forward to a busy meeting which hopefully will be successful with some important new results on clinical complement research.

Alike in previous conferences in Cardiff or Heidelberg, we offer the opportunity for young researchers to learn at the Teaching Day.

We wish to express our sincere gratitude to the Board of the European Complement Network, to the Organising Committee, as well as to the International Complement Society, EFIS, NKTH, and many other sponsors who have helped to implement the 12th Meeting on Complement in Human Disease at Visegrád, Hungary.

Lilian Varga and George Füst
on behalf of the Organising Committee

COMMITTEES

Local Organising Committee

Lilian Varga, 3rd Department of Internal Medicine, Semmelweis University, Budapest, Hungary

George Füst, 3rd Department of Internal Medicine, Semmelweis University, Budapest, Hungary

Henriette Farkas, 3rd Department of Internal Medicine, Semmelweis University, Budapest, Hungary

Anna Erdei, Department of Immunology, Loránd Eötvös University, Budapest

Péter Gál, Institute of Enzymology, Biological Research Centre, Hungarian Academy of Sciences, Budapest

Zoltán Prohászka, 3rd Department of Internal Medicine, Semmelweis University, Budapest, Hungary

Éva Rajnavölgyi, Institute of Immunology, Medical and Health Science Centre, Faculty of Medicine, University of Debrecen, Debrecen

János Szabeni, Hungarian Academy of Sciences – Semmelweis University Research Group for Paediatrics and Nephrology, Budapest

ECN board

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Paulo Santos, Portugal

Cornelia Speth, Austria

Francesco Tedesco, Italy

Lilian Varga, Hungary

CONFERENCE VENUE

Thermal Hotel Visegrád****

2025 Visegrád, Lepence-völgy hrsz. 1213

Tel.: +36-26-801-900

Fax: +36-26-801-918

www.thv.hu

E-mail: info@thv.hu

Other official conference hotels:

Hotel Honti* & Pension**

2025 Visegrád, Fő u. 66

Tel: +36-26-398-120

Hotel Visegrád***

2025 Visegrád, Rév u. 15

Tel: +36-26-397-034

REGISTRATION

Registration fees

	Before 30 April 2009	After 30 April 2009
Participants	460 EUR	530 EUR
Students	290 EUR	360 EUR
Accompanying persons	120 EUR	120 EUR

Registration fee for congress participants include:

- Abstract fee
- Admission to all parts of the Conference
- Printed material of the Conference (final programme, abstract book)

- Conference bag
- Welcome cocktail (5 September)
- Coffee breaks (6–7–8 September)
- Lunches (6–7 September, sandwich lunch on 8 September)
- Banquet (7 September)
- Sightseeing tour (8 September)
- Membership for the European Complement Network 2009–2011
- Budapest – Visegrád – Budapest transfer on certain days

Registered accompanying persons are entitled to receive:

- Welcome cocktail (5 September)
- Banquet (7 September)
- Sightseeing tour (8 September)
- Budapest – Visegrád – Budapest transfer on certain days

On-site registration

The registration desk will be open during the following hours:

Friday,	4 September 2009	16:00–20:00	Thermal Hotel Visegrád
Saturday,	5 September 2009	07:30–19:00	Thermal Hotel Visegrád
Sunday,	6 September 2009	07:30–18:15	Thermal Hotel Visegrád
Monday,	7 September 2009	08:00–19:00	Thermal Hotel Visegrád
Tuesday,	8 September 2009	08:00–13:00	Thermal Hotel Visegrád

On-site registrations will be accepted but cannot be guaranteed to receive all congress documents. Please arrive early if you wish to register on-site.



INTRODUCTION OF SPONSORING COMPANIES

The Quidel® Specialty Products Group identifies, develops, manufactures and markets unique diagnostic and research assays and reagents with applications in bone health, oncology and inflammatory diseases. Products include C1 Inhibitor, Bb Plus and SC5b-9 EIA Kits as well as many monoclonal and polyclonal antibodies. Our kits and reagents are marketed worldwide under the MicroVue® brand.

Sanquin Blood Supply Foundation, an internationally recognized leader in research and manufacturing of blood and plasma products, works on a not for profit basis, to provide blood supplies and to promote transfusion medicine. Sanquin is the major supplier of state of the art plasma derived products for patients in the Netherlands, Belgium and Finland. After the first introduction of a C1-esterase inhibitor in 1972, Sanquin has worked with Viropharma Inc. to introduce a fourth generation product this year.

ViroPharma Incorporated is a multinational biotechnology company committed to developing and commercializing innovative products that address unmet medical needs.

Our current focus is to develop these products for physician specialists that support patients with serious diseases caused by CMV, (*C. difficile*), and hereditary angioedema.

In everything we do, throughout our organization, we are committed to patient and physician needs, as we work to bring new products to markets with few, if any, therapeutic options. We are dedicated to transforming the promise of biotechnology into therapies that have the power to restore health and save lives.

TEACHING DAY – Friday, 5th September 2009

To maintain the respectabilities **Teaching Day** is organised for a limited number of young participants (graduated and post-graduated students and others new to the field).

Participation in the Teaching Day is possible with valid registration, if the registration fee for the conference is paid. The Teaching Day has no specific registration fee.

The topics of the Teaching Day are:

- 1.) Complement in innate and adaptive immunity
- 2.) Genetics and deficiencies
- 3.) Activation and regulation
- 4.) Structure and function
- 5.) Inflammatory and autoimmune disorders
- 6.) Cancer and transplantation

- 7.) Therapeutical approaches
- 8.) Factor H-related diseases and animal models
- 9.) Complement and infection
- 10.) Modern complement techniques, test

TIMETABLE FOR THE TEACHING DAY

- 07:30–09:00 Registration
- 09:00–09:30 **Introduction** by *Jörg Köhl* in room **Zafir 3**
- 09:30–11:00 **Session I**
- Room 1 **Complement in innate and adaptive immunity** – *Jörg Köhl, Claudia Kemper*
 - Room 2 **Genetics and deficiencies** – *Santiago Rodriguez de Cordoba, Kevin Marchbank*
 - Room 3 **Activation and regulation** – *Claire Harris, Mihály Józsi*
 - Room 4 **Cancer and transplantation** – *Francesco Tedesco, Sakari Jokiranta*
 - Room 5 **Complement and infection** – *Jos van Strijp, Peter Kraiczy, Jean van den Elsen*
- 11:00–11:30 **Coffee**
- 11:30–13:00 **Session II**
- Room 1 **Complement in innate and adaptive immunity** – *Jörg Köhl, Claudia Kemper*
 - Room 2 **Structure and function** – *Péter Gál, Piet Gros*
 - Room 3 **Inflammatory and autoimmune disorders** – *Mohamed Daha, Anna Blom*
 - Room 4 **Therapeutic approaches** – *János Szebeni, Tom Mollnes, John Lambris, Milan Basta*
 - Room 5 **Modern complement techniques** – *József Prechl, Michael Kirschfink*
- 13:00–14:00 **Lunch**
- 14:00–15:30 **Session III**
- Room 1 **Activation and regulation** – *Claire Harris, Mihály Józsi*
 - Room 2 **Inflammatory and autoimmune disorders** – *Moh Daha, Anna Blom*
 - Room 3 **Factor H-related diseases and animal models** – *Matthew Pickering, Peter Zipfel*
 - Room 4 **Complement and infection** – *Jos van Strijp, Peter Kraiczy, Jean van den Elsen*
 - Room 5 **Modern complement techniques** – *József Prechl, Michael Kirschfink*
- 15:30–16:10 **Round table discussion** – *Mohamed Daha* in room **Zafir 3**

SCIENTIFIC PROGRAMME

Instruction for speakers

The time devoted for each talk is 12 minutes. The presenter can decide how much time he leaves for the talk and for the questions, but generally 10 minutes are counted for the presentation and 2 minutes for the questions. Only computer projectors (1024 x 768) are available for the presentations. PC with Power Point software will be provided. Please, do not use MAC file format and make sure to bring your presentation file written on a CD ROM or USB memory stick, please do not bring a zip disk. File format is preferred in ppt for Office 2003, 2007. Pdf files can also be handled. Authors are kindly requested to give their presentation file to the technician in the Lecture hall before the beginning of the corresponding session.

Instruction for poster presenters

The useful area of the poster board is 95 cm width and 119 cm height. The recommended size for your poster is about the A/0 standard (cca. 84 x 119 cm). Pins will be provided to fix the posters.

Poster Session 1 on 6 September (P01–P44)

Poster Session 2 on 7 September (P45–P82)

Please remove your poster at the end of the dedicated day.

Exhibitors

Exhibition area will be located on level –1, next to the coffee break area.

List of exhibitors

Euro-DiagnosTICA AB

Hycult biotech

Queidel Corporation

Friday, 4th September

16:00–20:00 Registration

Saturday, 5th September

07:30– Registration

08:30–17:00 **Teaching Day with invited speakers**

18:30–20:00 **Opening ceremony**
Welcome cocktail

Sunday, 6th September

07:30– **Registration**

08:30–09:10 **Invited lecture**

Dendritic cells as multifunctional master regulators of immune responses

Éva Rajnavölgyi

Institute of Immunology, Medical and Health Science Centre,
University of Debrecen, Hungary

09:10–10:40 **Session 1: Structure and function of complement proteins**

Chairs: *P. Gál, R. Sim*

01 **M-ficolin, a humoral and cellular pattern recognition molecule: Characteristics and biological variations in serum**

Thomas Wittenborn¹, Steffen Thiel¹, Lisbeth Jensen¹, Hans J. Nielsen², Jens C. Jensenius¹

¹Department of Medical Microbiology and Immunology, University of Aarhus, Denmark

²Department of Surgical Gastroenterology, Hvidovre Hospital, University of Copenhagen, Denmark

02 **Ficolin-1 exhibits self-recognition of sialic acid on monocytes and granulocytes through the fibrinogen-like domain**

Christian Honoré, Sara Rørvig, Tina Hummelshøj, Mikkel-Ole Skjød, Niels Borregaard, Peter Garred

Laboratory of Molecular Medicine, Department of Clinical Immunology, and the Granulocyte Laboratory, Department of Hematology, Rigshospitalet, Copenhagen, Denmark

03 Carbohydrate recognition properties of human ficolins: glycan array screening provides insights into the sialic acid binding specificity of M-ficolin

E. Gout, V. Garlatti, D. Smith, M. Lacroix, T. Lunardi, G.J. Arlaud, C. Gaboriaud, N.M. Thielens

Institut de Biologie Structurale, Grenoble, France, Emory University School of Medicine, Atlanta, USA

04 A quantitative assay for MAp19, the alternative splice product of the MASP-2 gene

S.E. Degn, J.C. Jensenius, S. Thiel, S.H. Andersen

Department of Medical Microbiology and Immunology, University of Aarhus, Denmark

05 Both domains 19 and 20 are involved in binding of FH to C3d/C3b

Arnab Bhattacharjee^{1,2}, Markus J. Lehtinen¹, Tommi Kajander², Adrian Goldman², T. Sakari Jokiranta¹

¹Haartman Institute, Dept. of Bacteriology and Immunology and

²Structural Biology and Biophysics, Institute of Biotechnology, University of Helsinki, Finland

06 3D models of the C3bB and C3bBb complexes: a structural framework to understand regulatory mechanisms and disease-associated mutations

Agustín Tortajada^{1,2}, Eva Torreira¹, Tamara Montes^{1,2}, Oscar Llorca¹, Santiago Rodríguez de Córdoba^{1,2}

¹Centro de Investigaciones Biológicas, Consejo Superior de Investigaciones Científicas, Madrid, Spain

²Centro de Investigación Biomédica en Enfermedades Raras and Instituto Reina Sofía de Investigaciones Nefrológicas, Madrid, Spain

07 Putative CCAAT/NFY and NFAT transcription factor binding sites are important for expression of the C5a receptor in the human monocytic U937 cell line

Elizabeth A. Palmer, Matthew I. Stott, Carmen W. van den Berg

Department of Pharmacology, Oncology and Radiology, Cardiff University, School of Medicine, Cardiff, UK

10:40–11:10 **Coffee break**

11:10–12:40 **Session 2: Complement genetics and deficiencies**

Chairs: *T. Fujita, P. Garred*

08 Immunodeficiency associated with FCN3 mutation and ficolin-3 deficiency

Tina Hummelshøj, Christian Honoré, Lea Munthe-Fog, Hans O.

Madsen, Henrik Permin, Peter Garred

Laboratory of Molecular Medicine, Department of Clinical Immunology, Rigshospitalet, Copenhagen, Denmark

- 09 **Characterization of the ficolin genes (FCNs) in primates**
Janna Nissen, Tina Hummelshøj, Claus Koch, Peter Garred
Laboratory of Molecular Medicine, Department of Clinical Immunology, Rigshospitalet, Copenhagen, Denmark
- 010 **C1-inhibitor homozygous deficiency: Comparative study in two non-related families**
A. López-Lera, R. Mena de la Cruz, S. Garrido, G. Fontán, M. López-Trascasa
Hospital Universitario La Paz (Madrid, Spain); Centro de Investigación Biomédica en Red de Enfermedades Raras (CIBERER)
- 011 **Glomerulonephritis associated with a novel factor H mutation and a large deletion in the complement factor H locus**
L. Schejbel, I.M. Schmidt, H. Marquart, P. Garred
Laboratory of Molecular Medicine, Department of Clinical Immunology and Department of Pediatrics, Rigshospitalet, Copenhagen, Denmark
- 012 **A mutant complement factor H-related 5 protein is associated with familial C3 glomerulonephritis**
E. Goicoechea de Jorge¹, D.P. Gale^{2,6}, H.T. Cook³, R. Martinez-Barricarte⁴, A. Hadjisavvas⁵, C.D. Pusey⁶, A. Palmer⁶, V. Frémeaux-Bacchi⁷, S. Rodriguez de Cordoba⁴, P.H. Maxwell², M.C. Pickering¹
¹Molecular Genetics and Rheumatology Section, Imperial College, London, UK
²Division of Medicine, University College, London, UK
³Department of Histopathology, Faculty of Medicine, Imperial College, London, UK
⁴Centro de Investigaciones Biológicas (CSIC), Centro de Investigación Biomédica en Enfermedades Raras and Instituto Reina Sofía de Investigaciones Nefrológicas, Madrid, Spain
⁵Department of Electron Microscopy and Pathology, Cyprus Institute of Neurology and Genetics, Nicosia, Cyprus
⁶Imperial College Kidney and Transplant Institute, Imperial College, London, UK
⁷Service d'Immunologie Biologique, Hôpital Européen Georges Pompidou, Paris, France and INSERM UMRS 872, Cordeliers Research Center, Paris, France

- 013 **Total lack of CR1 (C3b/C4b receptor, CD35) on erythrocytes in a Lupus patient, homozygous for two SNP in the promoter of CR1 gene**
A. Kisslerli¹, V. Duret¹, B. Donvito¹, M. Tonye Libyh¹, W. Mahmoud¹, B. Reveil¹, E. Lavalard¹, F. Haidar¹, T. Tabary¹, J.L. Pennaforte², B.N. Pham³, J.H.M. Cohen¹

¹Laboratoire d'Immunologie UFR Médecine. Physio-Pathologie Dysimmunitaire et Infectieuse Humaine (PPDIH). EA (3798) Pôle Biomolécules IFR 53. URCA Reims, France

²Service de Médecine Interne CHU – URCA Reims, France

³INTS – CNRGS Paris, France

- 014 **Genetic defects leading to complete deficiency of C6 occur with high frequency in South Africa**

Tricia Owen¹, Howard Henderson¹, B. Paul Morgan², Ann Orren^{1,2}

¹University of Cape Town, South Africa

²Cardiff University, Wales, UK

12:40–14:00 **Lunch break**

14:00–15:00 **Poster session 1 (P1–P44)**

15:00–15:20 **Lectures of Pharmaceutical Companies**

Development of a new generation of plasma-derived C1-inhibitor concentrate

C. Kramer, R. van Beem, A. Koenderman, J. Over, P. Strengers
Sanquin Blood Supply Foundation, Amsterdam, The Netherlands

Safety and efficacy of Cinryze, a new C1 inhibitor in the management of Hereditary Angioedema, HAE

P. Wijngaard

Viropharma SPRL, Branch Basel, c/o Copartner Revision AG, Switzerland

15:20–16:50 **Session 3: Complement in infection and sepsis**

Chairs: *W. Schwaeble, S. Meri*

- 015 **The lectin pathway of the complement system has a protective role in disseminated Candidiasis**

H.I. Kenawy, K. Rajakumar, C.M. Stover, W.J. Schwaeble

Department of Infection, Immunity and Inflammation, University of Leicester, Leicester, UK

- 016 **Factor H and factor H-related protein 1 mediate interaction of human neutrophils with *Candida albicans* via complement receptor 3 and enhance neutrophil antimicrobial activity**

Josephine Losse¹, Peter F. Zipfel^{2,3}, Mihály Józsi¹

¹Junior Research Group Cellular Immunobiology, Leibniz Institute for Natural Product Research and Infection Biology, Hans Knöll Institute, Jena, Germany

²Department of Infection Biology, Leibniz Institute for Natural Product Research and Infection Biology – Hans Knöll Institute, Jena, Germany

³Friedrich Schiller University, Jena, Germany

017 Human *Astrovirus* Coat Protein binds C1q and MBL inhibiting the classical and the lectin Pathways of complement activation

Neel K. Krishna, Pamela S. Hair, K.B. Crawford, J.Q. Gronemus, V.P. Salvi, K.M. Cunnion, G.J. Arlaud, N. Rawal

Eastern Virginia Medical School, Microbiology and Molecular Cell Biology

018 Key role of complement receptor 1 in the initial binding of *Escherichia coli* and *Neisseria meningitidis* to erythrocytes in human whole blood

Ole-Lars Brekke^{1,2}, Bernt Christian Hellerud³, Dorte Christiansen¹, Hilde Fure¹, Grethe Bergseth¹, Graham Leslie⁴, John Lambris⁵, Tom Eirik Mollnes^{1,2,3}

¹Department of Laboratory Medicine, Nordland Hospital, Bodo

²Institute of Medical Biology, University of Tromsø, Norway

³Institute of Immunology, University of Oslo and Rikshospitalet University Hospital, Oslo, Norway

⁴Department of Immunology and Microbiology, Institute for Medical Biology, University of Southern Denmark, Odense, DK

⁵John D. Lambris, Department of Pathology and Laboratory Medicine, University of Pennsylvania, Philadelphia, USA

019 Serovar variations in mechanism and susceptibility for complement killing of *Ureaplasma parvum*

Michael L. Beeton, Saliresh Kotecha, O. Brad Spiller

Dept. Child Health, Cardiff University School of Medicine, Cardiff, UK

020 Complement (C) activation contributes to microvascular thrombosis in Shiga toxin-associated HUS

Simona Buelli¹, Sara Gastoldi¹, Marina Morigi¹, Miriam Galbusera¹, Monica Locatelli¹, Daniela Rottoli¹, Anna Pezzotta¹, Chiara Pagani¹, Marina Noris¹, Giuseppe Remuzzi^{1,2}, Carla Zoja¹

¹Mario Negri Institute

²Unit of Nephrology and Dialysis, Ospedali Riuniti, Bergamo, Italy

021 An acetylated anti-C5a complementary peptide reduced cytokines and free radicals and prolongs survival time in a neonatal sepsis model

Mohamed Hamed Hussein^{1,3,4}, Shin Kato¹, Tatenobu Goto¹, Ghada Abdel-Hamid Daoud^{1,3}, Ineko Kato¹, Satoshi Suzuki¹, Hajime Togari¹, Takashi Hashimoto⁴, Masaki Imai², Noriko Okada², Hidechika Okada^{2,5}

¹Department of Pediatrics and Neonatology

²Department of Immunology, Nagoya City University Graduate School of Medical Sciences, Nagoya, Japan

³Maternal and Child Health Department, VACSERA, Giza, Egypt

⁴Department of Pediatric Surgery and Liver Transplantation, Fujita Health University School of Medicine, Toyoake, Aichi, Japan

⁵Fukushima Hospital Choju medical Institute, Toyohashi, Japan

16:50–17:20 **Coffee break**

17:20–19:00 **Session 4: Complement in autoimmune and inflammatory diseases**

Chairs: *M. Daha, P. Morgan*

022 Factor H plays an essential role in the control of airway hyperresponsiveness and eosinophilic pulmonary inflammation in experimental asthma

V. Michael Holers, Kat Takeda, Joshua M. Thurman, Steve Tomlinson, Viviana P. Ferreira, Claudio Cortes, Michael K. Pangburn, Erwin W. Gelfand

Department of Medicine, University of Colorado Denver, School of Medicine, Aurora, CO; National Jewish Health, Denver, CO;

Department of Microbiology and Immunology, Medical University of South Carolina, Charleston, SC; and the Department of Biochemistry, University of Texas Health Sciences Center, Tyler, TX, USA

023 Opposing roles for C5aR and C5L2 in allergic asthma

Xun Zhang¹, Jörg Köhl^{1,2}

¹Division of Molecular Immunology, Cincinnati Children's Hospital Medical Center and University of Cincinnati College of Medicine, Cincinnati, OH, USA

²Institute for Systemic Inflammation Research, University of Lübeck, Lübeck, Germany

024 Proteases from the fungal allergen *Aspergillus* regulate airway epithelial expression of complement component C3 and its activation fragment C3a

Eva Morschl¹, Anne T. Bell¹, Paul Porter², David B. Corry², Scott M. Drouin¹

¹Research Center for Immunology and Autoimmune Diseases, Brown Foundation Institute of Molecular Medicine for the Prevention of Human Diseases, The University of Texas Health Science Center at Houston

²Departments of Medicine and Immunology, Baylor College of Medicine, Houston, TX, USA

- 025 Non-invasive detection of renal inflammation using Complement Receptor-2 conjugated to superparamagnetic iron oxide nanoparticles**
Natalie J. Serkova, Brandon Renner, Brian Larsen, Conrad Stoldt, Kendra M. Hasebroock, Erica L. Bradshaw-Pierce, V. Michael Holers, Joshua M. Thurman
 University of Colorado Denver, Aurora, CO, USA
 University of Colorado Boulder, Boulder, CO, USA
- 026 Immune complex bound C1q enhances complement activation on glomerular endothelial cells**
Roelof Flierman¹, Ria M.C. Faber-Krol¹, Simon C. Satchell², Peter W. Mathieson², Cees van Kooten¹, Johan van der Vlag³, Jo Berden³, Mohamed R. Daha¹
¹Department of Nephrology, Leiden University Medical Center, Leiden, The Netherlands
²Academic Renal Unit, University of Bristol, Southmead Hospital, Bristol, UK
³Division of Nephrology, Nijmegen Centre for Molecular Life Sciences, Radboud University Nijmegen Medical Centre, Nijmegen, The Netherlands
- 027 Complement activation by cytokine-activated neutrophils in the context of Anti-Neutrophil-Cytoplasm Autoantibodies vasculitis**
M. Frimat¹, L. Camous¹, L. Roumenina², S. Bigot¹, P. Lesavre¹, V. Fremeaux-Bacchi², L. Halbwachs-Mecarelli¹
¹INSERM U845, Necker Hospital
²Cordeliers Research Center, INSERM UMRS 872, Paris, France
- 028 Human anti-citrullinated protein antibodies (ACPA) not only activate the classical – but also the alternative complement pathway**
L.A. Trouw, E.M. Haisma, E.W. Levarht, D. van der Woude, A. Ioan-Facsinay, M.R. Daha, T.W. Huizinga, R.E. Toes
 Department of Rheumatology, Leiden University Medical Center, Leiden, The Netherlands

Monday, 7th September

08:30–09:10 **Invited lecture**

Immune mechanisms in the ischemia/reperfusion injury

George Tsokos

Beth Israel Deaconess Medical Center, Harvard Medical School,
Boston, MA, USA

09:10–10:40 **Session 5: Complement activation, regulation, adaptive immune response**

Chairs: *A. Blom, A. Erdei*

029 **Contributions of MASP-1 and MASP-3 to fat metabolism by activation of complement factor D**

Minoru Takahashi, Daisuke Iwaki, Yuichi Endo, Teizo Fujita

Department of Immunology and Fukushima Medical University School
of Medicine, Fukushima, Japan

030 **Complement protease MASP-1 activates human endothelial cells: PAR4 activation is a link between complement and endothelial function**

Márton Megyeri¹, Veronika Makó², László Beinrohr¹, Zoltán Doleschall³, Zoltán Prohászka², László Cervenak², Péter Závodszy¹, Péter Gál¹

¹Institute of Enzymology, Biological Research Center, Hungarian
Academy of Sciences, Budapest, Hungary

²Semmelweis University, 3rd Department of Medicine, Budapest,
Hungary

³National Institute of Oncology, Department of Pathogenetics,
Budapest, Hungary

031 **Cartilage oligomeric matrix protein (COMP) has a dual role in complement regulation**

K.E. Happonen¹, A. Pramhed², D. Heinegård², A.M. Blom¹

¹Department of Laboratory Medicine, Wallenberg Laboratory,
University Hospital Malmö, Lund University, Sweden

²Department of Experimental Medical Science, BMC, Lund University,
Sweden

032 **Physiological upregulation of CR1 and FcγRII on memory B cells is lacking in SLE patients, but is not related to the cells' activation state**

Anna Erdei^{1,3}, Andrea Isaák¹, Mariann Kremlitzka¹, Gyula Poór²

¹Department of Immunology, Eötvös Loránd University

²Institute of Rheumatology and Physiotherapy

³Research Group of the Hungarian Academy of Sciences, Budapest,
Hungary

033 **CD46-mediated Treg induction requires intracellular CD46 processing by gamma-secretase**

Gaëlle Le Friec, John Cardone, Claudia Kemper

King's College London, UK

034 **CD46: A molecular switch between effector and regulator T cell responses?**

John Cardone, Gaëlle Le Friec, Claudia Kemper

MRC Centre for Transplantation, King's College London, UK

035 **Generation of functional antibody profiles using complement deposition data from protein arrays**

Jozsef Prechl, Krisztian Papp, Peter Vegh, Anna Erdei

Department of Immunology, Eötvös Loránd University, Budapest, Hungary

10:40–11:10 **Coffee break**

11:10–12:40 **Session 6: Complement in transplantation and cancer**

Chairs: *M. Kirschfink, B. Nilsson*

036 **Specific targeting of anti-CD59 siRNA by Herceptin®-conjugated liposomes improves complement-mediated cytotoxicity of breast carcinoma cells**

W. Li, N. Geis, M. Kirschfink

Institute of Immunology, University of Heidelberg, Heidelberg, Germany

037 **Regulation of expression of CD59 via interplay between REST and nucleolin transcription factors; implications for cancer immunotherapy**

Teeo Tediose, Martin V. Kolev, Paul Brennan, B. Paul Morgan, Rossen M. Donev

Department of Medical Biochemistry and Immunology, School of Medicine, Cardiff University, Cardiff, UK

038 **Transcriptional control of expression of complement regulators in tumour cells: peptide inhibition of a transcription enhancer reduces expression of multiple regulators**

Martin V. Kolev, Marieta M. Ruseva, Claire L. Harris, B. Paul Morgan, Rossen M. Donev

Department of Medical Biochemistry and Immunology, School of Medicine, Cardiff University, Cardiff, UK

039 **Sublytic complement inhibits sTNF- α induced tumor cell necrosis**

Lili Liu, Zhuoya Li, Michael Kirschfink

Institute of Immunology, University of Heidelberg, Heidelberg, Germany

040 **Hypoxia induces complement activation on human kidney proximal tubular epithelial cells via the classical pathway**

P. van der Pol¹, A. Roos¹, S.P. Berger¹, C. van Kooten¹, P.W. Mathieson², S.C. Satchell², M.R. Daha¹

¹Department of Nephrology, Leiden University Medical Center, Leiden, The Netherlands

²Academic Renal Unit, University of Bristol, Southmead Hospital, Bristol, UK

041 **Mannan Binding Lectin Associated Serine Protease-2 (MASP-2) is a critical player in the pathophysiology of Renal Ischaemia Reperfusion (I/R) Injury and mediates tissue injury in absence of complement C4**

Conrad A. Farrar¹, Elham Asgari¹, Nicholas Lynch², Silke Roscher², Cordula Stover², Wilhelm J. Schwaeble², Steven H. Sacks¹

¹MRC Centre for Transplantation, King's College London, Guy's Campus, London, UK

²Department of Infection, Immunity and Inflammation, University of Leicester, Leicester, UK

042 **Towards an integrated cytotopic strategy for graft modification in transplantation – complement and coagulation**

R.A.G. Smith¹, J. Karegli¹, T. Melchionna¹, C.A. Farrar¹, J.H. McVey², A. Dorling³, S.H. Sacks¹

¹MRC Centre for Transplantation, NIHR Comprehensive Biomedical Research Centre, Guy's Hospital, London, UK

²Thrombosis Research Institute, London, UK

³Department of Immunology, Imperial College London, London, UK

12:40–13:40 **Lunch break**

13:40–14:40 **Poster Session 2 (P45–P82)**

14:40–16:10 **Session 7: Pathogen Complement evasion of pathogens**

Chairs: *A. Grumach, R. Würzner*

044 **The complement regulator-acquiring surface protein 3 of the Lyme disease spirochete *Borrelia spielmanii* interacts with distinct members of the factor H protein family**

Peter Kraiczy¹, Annekatriin Seling¹, Volker Fingerle², Christine Skerka³, Reinhard Wallich⁴, Brian Stevenson⁵, Peter F. Zipfel^{3,6}

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²Bayerisches Landesamt für Gesundheit und Lebensmittelsicherheit, Oberschleißheim, Germany

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⁴Institute for Immunology, University Hospital of Heidelberg, Heidelberg, Germany

⁵Department of Microbiology, Immunology, and Molecular Genetics, University of Kentucky College of Medicine, Lexington, Kentucky, USA

⁶Friedrich Schiller University, Jena, Germany

045 Complement activation by *Mycobacterium bovis* BCG

Maria V. Carroll¹, Anders Krarup², Edith Sim¹, Robert B. Sim¹

¹Department of Pharmacology, University of Oxford, Oxford UK

²Division of Infectious Disease, University Hospital Zürich, Zürich, Switzerland

046 The crystal structure of *Staphylococcus aureus* immune evasion protein Sbi in complex with C3d: Evidence for two separate binding modes?

Elizabeth A. Clark, Susan Crennell, Abhishek Upadhyay, Julia D. Mackay, Stefan Bagby, Jean van den Elsen

University of Bath, Department of Biology and Biochemistry, Bath, UK

047 *Pseudomonas aeruginosa* CRASP-2 is a novel multifunctional surface protein that binds Factor H, Factor H related protein 1 and plasminogen

Teresia Hallström¹, Matthias Mörgelin², Anja Kunert¹, Katja Köhler¹, Christine Skerka¹, Peter F. Zipfel¹

¹Department of Infection Biology, Leibniz Institute for Natural Product Research and Infection Biology, Hans Knoell Institute, Jena, Germany

²Section of Clinical and Experimental Infectious Medicine, Department of Clinical Sciences, Lund University, Lund, Sweden

048 *Candida albicans* HGT1 is a multifunctional complement evasion molecule

Iwona Lesiak¹, Tobias Schwarzmüller², Karl Kuchler², Reinhard Würzner¹

¹Division of Hygiene and Medical Microbiology, Innsbruck Medical University

²Christian Doppler Laboratory for Infection Biology, Max F. Perutz Laboratories, Medical University Vienna, Austria

049 Secreted aspartic proteinases (Saps) of *Candida albicans* degrade host complement

Katharina Gropp¹, Lydia Schild², Bernhard Hube^{2,3}, Peter F. Zipfel^{1,3}, Christine Skerka¹

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³Friedrich Schiller University, Jena, Germany

16:10–16:30 **Coffee break**

16:30–18:00 **Session 8: Complement in Cardiovascular, neurological diseases and new therapeutical intervention**

Chairs: *T. Mollnes, G. Tsokos*

050 **MHC-related risk markers for coronary artery disease – special emphasis on C4**

Riitta Paakkanen, Anil Palikhe, Mikko Seppänen, Markku S Nieminen, Hanna Vauhkonen, Pekka Saikku, Juha Sinisalo, Marja-Liisa Lokki
Haartman Institute, University of Helsinki

051 **Influence of functional deficiency of complement mannose-binding lectin on outcome of patients with acute ST-elevation myocardial infarction undergoing primary percutaneous coronary intervention**

Marten Trendelenburg¹, Pierre Theroux², Amanda Stebbins³, Christopher Granger⁴, Paul Armstrong⁵, Matthias Pfisterer⁶

¹Internal Medicine and Clinical Immunology Lab, University Hospital Basel, Switzerland

²Montreal Heart Institute, Montreal, Quebec, Canada

³Duke Clinical Research Institute, Durham, NC, U.S.

⁴Duke University Medical Centre, Durham, NC, U.S.

⁵Department of Medicine, University of Alberta, Edmonton, Alberta, Canada

⁶Department of Cardiology, University Hospital Basel, Switzerland

052 **Prion protein oligomers and C1q recognition**

Paul Erlich^{1,2}, Chantal Dumestre-Pérard^{1,2,3}, Wai Li Ling⁴, Catherine Lemaire-Vieille^{1,2}, Gérard Arlaud⁴, Jean Gagnon^{1,2}, Jean-Yves Cesbron^{1,2,3}

¹Laboratoire Adaptation et Pathogénie des Micro-organismes, Université Joseph Fourier, Grenoble, France

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³Laboratoire d'Immunologie, Pôle de Biologie, CHU Grenoble, Grenoble, France

⁴Institut de Biologie Structurale Jean-Pierre Ebel, CEA-CNRS-UJF, Grenoble, France

- 053 Prevention of antigen-induced arthritis by targeting synovial endothelium with a neutralizing recombinant antibody to C5**
P. Macor^{1,2}, *P. Durigutto*¹, *L. De Maso*¹, *A. Cortini*¹, *C. Garrovo*³, *P. Edomi*¹, *C. Pitzalis*⁴, *F. Tedesco*¹
¹Department of Life Sciences, University of Trieste, Trieste, Italy
²ADIENNE Pharma and Biotech, Bergamo, Italy
³Optical Imaging Laboratory, CBM, Area Science Park, Trieste, Italy
⁴Centre for Experimental Medicine and Rheumatology, William Harvey Research Institute, St Bartholomew's and Royal London School of Medicine, London, UK
- 054 The effect of C5 inhibition by eculizumab on allergen-induced asthmatic responses in patients**
*Gail Gauvreau*¹, *Louis-Philippe Boulet*², *Beth Severino*³, *Rick Watson*¹, *Tao Peng*³, *George Obminski*¹, *Philippe Prince*², *Francine Deschesnes*², *Tara Strinich*¹, *K.J. Killian*¹, *Joanne Cote*², *Paul O'Byrne*¹, *Yi Wang*³
¹Faculty of Health Sciences, McMaster University, Department of Medicine, Hamilton, Canada
²Université Laval, Institut de cardiologie et de pneumologie de l'Hôp, Québec, Canada
³Alexion Pharmaceuticals Inc., Cheshire, USA
- 055 Selective inhibition of TNF- α and IL-1 β do not affect *E. coli*-induced inflammation in human whole blood, in contrast to combined complement- and CD14-inhibition**
Andreas Barratt-Due, *Ebbe B. Thorgersen*, *Julie Lindstad*, *Anne Pharo*, *Ole-Lars Brekke*, *Dorte Christiansen*, *John D. Lambris*, *Tom E. Mollnes*
Institute of Immunology, Rikshospitalet, University of Oslo, Norway
- 19:00–22:00 **Banquet** – Dress code is casual (please take a warmer pullover with you, as evenings are colder in September).

Tuesday, 8th September

08:30–09:45 **Session 9: Novel complement related diseases I.**

Chairs: *Z. Prohászka, P. Zipfel*

056 Genomic disorders associated with aHUS

Kevin Marchbank¹, Lisa Strain², Peter Zipfel³, Veronique Fremeaux-Bacchi⁴, Paul Morgan⁵, Claire Harris⁵, Scott Staniforth¹, Lucy Holmes¹, David Kavanagh¹, Tim Goodship¹

¹Institutes of Human Genetics and Cellular Medicine, Newcastle University, Newcastle upon Tyne, UK

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⁴Service d'Immunologie Biologique, Hôpital Européen Georges Pompidou, Paris, France

⁵Department of Medical Biochemistry and Immunology, School of Medicine, Cardiff University, Cardiff, UK

057 Influence of genotype on clinical characteristics of atypical hemolytic uremic syndrome (aHUS) with pediatric and adult onset

V. Fremeaux-Bacchi^{1,2}, F. Fakhouri³, A. Garnier⁴, F. Bienaime², A.L. Sellier-Leclerc⁴, M.A. Dragon-Durey^{1,2}, C. Noel⁵, C. Loirat⁴

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⁴Service de Néphrologie, Hôpital Robert Debré, Paris, France

⁵Service de Néphrologie, Hôpital Calmette, Lille, France

058 Factor H autoantibodies in a Hemolytic Uremic Syndrome patient presenting homozygous CFHR1 and CFHR4A deficiency

Cynthia Abarrategui Garrido^{1,6}, Rubén Martínez Barricarte^{2,6}, Stefanie Strobel³, Elena Fariza Requejo^{1,6}, Antonio Giménez Llort⁴, Margarita López Trascasa^{5,6}, Mihály Józsi³, Santiago Rodríguez de Córdoba^{2,6}, Pilar Sánchez-Corra^{1,6}

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²Centro de Investigaciones Biológicas, Consejo Superior de Investigaciones Científicas, Madrid, Spain

³Junior Research Group Cellular Immunobiology, Leibniz Institute for Natural Product Research and Infection Biology, Hans Knöll Institute, Jena, Germany

⁴Nephrology Unit, Hospital Sant Joan de Dèu. Esplugues de Llobregat, Spain

⁵Immunology Unit, Hospital Universitario La Paz, Madrid, Spain

⁶Centro de Investigación Biomédica en Red de Enfermedades Raras (CIBERER)

059 Anti-factor H autoauto-antibodies in atypical Hemolytic Uremic Syndrome and Membrano-Proliferative Glomerulonephritis: non univocal histories

M-A. Dragon-Durey^{1,2}, *C. Blanc*², *C. Loirat*³, *L. Roumenina*², *B. Moulin*⁴, *P. Le Pogamp*⁵, *V. Fremeaux-Bacchi*^{1,2}, *W.H. Fridman*^{1,2}

¹Service d'immunologie biologique, Hôpital Européen Georges Pompidou, APHP, Université Paris Descartes, Paris, France

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⁴Service de Néphrologie, dialyse et transplantation rénale, CHU de Strasbourg, Strasbourg, France

⁵Service de Néphrologie, CHU Pontchaillou, Rennes, France

060 Removal of heparan sulfate from glomerular endothelial cells does not abolish FH19-20 binding

*Markus J. Lehtinen*¹, *Angelique L. Rops*², *Johan van der Vlag*², *T. Sakari Jokiranta*¹

¹The Department of Bacteriology and Immunology, Haartman Institute, University of Helsinki, Helsinki, Finland

²Nephrology Research Laboratory, Nijmegen Centre for Molecular Life Sciences, Division of Nephrology, Radboud University Nijmegen Medical Centre, Nijmegen, The Netherlands

061 Identification and characterization of a factor B autoantibody in membranoproliferative glomerulonephritis type II

*Stefanie Strobel*¹, *Miriam Zimmering*², *Krisztián Papp*³, *József Prechl*³, *Mihály Józsi*¹

¹Junior Research Group Cellular Immunobiology, Leibniz Institute for Natural Product Research and Infection Biology, Hans Knöll Institute, Jena, Germany

²Department of Pediatrics, Division of Nephrology, Charité Berlin, Berlin, Germany

³Immunology Research Group, Hungarian Academy of Sciences, Budapest, Hungary

09:45–10:15 **Coffee break**

10:15–10:45 **ECN Award lectures**

10:45–11:30 **Session 10: Novel complement related diseases II. and diagnostics aspects**

Chairs: *M. Holers, S. Jokiranta*

062 Deletion of CFHR1 and CFHR3 genes has a protective effect in Age Related Macular Degeneration

Nadine Lauer¹, Barbara Uzonyi¹, Bernhard H.F. Weber², Timothy Goodship³, Julia Böhme¹, Peter Charbel Issa⁴, Hendrik P.N. Scholl⁴, Frank G. Holz⁴, Christine Skerka¹, Peter F. Zipfel^{1,5}

¹Leibniz Institute for Natural Product Research and Infection Biology, Jena, Germany

²University of Regensburg, Institute of Human Genetics, Regensburg, Germany

³Institute of Nephrology, University of Newcastle upon Tyne, UK

⁴University of Bonn, Department of Ophthalmology, Germany

⁵Friedrich Schiller University, Jena, Germany

063 Factor H related human plasma proteins CFHR1, CFHR2 and CFHR3 regulate complement activation and exert anti-inflammatory activities

Hannes Eberhardt¹, Nadine Lauer¹, Manoj K. Pandey², Jörg Köhl^{2,3}, Andrea Hartmann¹, Mirco Ludwig¹, Peter F. Zipfel^{1,4}, Christine Skerka¹

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²Division of Molecular Immunology, Cincinnati Children's Hospital Research Foundation, Cincinnati, USA

³Institute for Systemic Inflammation Research, University of Lübeck, Lübeck, Germany

⁴Friedrich Schiller University, Jena, Germany

064 Complement factor H Ile62 polymorphism increases binding affinity for C3b and enhances cofactor activity

Agustín Tortajada¹, Tamara Montes¹, Ruben Martinez-Barricarte¹, B. Paul Morgan², Claire L. Harris², Santiago Rodríguez de Córdoba¹

¹Centro de Investigaciones Biológicas, Consejo Superior de Investigaciones Científicas, Centro de Investigación Biomédica en Enfermedades Raras and Instituto Reina Sofía de Investigaciones Nefrológicas, Ramiro de Maeztu 9, 28040 Madrid, Spain

²Department of Medical Biochemistry and Immunology, School of Medicine, Cardiff University, Cardiff, CF14 4XN, UK

- O65 Association of complement activation with preeclampsia**
Zoltán Prohászka^{1,3}, Attila Molvarec², Zoltán Derzsy², János Rigo Jr.², George Füst¹
¹IIIrd Department of Medicine, Semmelweis University, Budapest
²Ist Department of Obstetrics and Gynecology, Semmelweis University, Budapest
³Research Group of Inflammation Biology and Immunogenomics, Hungarian Academy of Sciences, Budapest, Hungary
- O66 Synergistic roles for C5aR and C5L2 in Goodpasture's disease**
Manoj K. Pandey¹, Jörg Köhl^{1,2}
¹Division of Molecular Immunology, Cincinnati Children's Hospital Medical Center and University of Cincinnati College of Medicine, Cincinnati, OH, USA
²Institute for Systemic Inflammation Research, University of Lübeck, Lübeck, Germany
- O67 Development of a functional assay specific for ficolin-3 mediated complement activation**
Estrid Hein, Christian Honoré, Mikkel-Ole Skjødt, Peter Garred
Laboratory of Molecular Medicine, Department of Clinical Immunology, Rigshospitalet, Copenhagen, Denmark
- 11:30–12:30 **Closing remarks with awards for the best presentations**
14:00–18:00 **Sightseeing tour**



Posters

- P01 Calcium induced folding and marginal stability of the CUB2 domain of C1r**
Balázs Major¹, József Kardos², Zsolt Lőrincz¹, Katalin A. Kékesi³, Péter Závodszy¹, Péter Gál¹
¹Institute of Enzymology, Biological Research Center, Hungarian Academy of Sciences, Budapest, Hungary
²Department of Biochemistry, Eötvös Loránd University, Budapest, Hungary
³Department of Physiology and Neurobiology, Eötvös Loránd University, Budapest, Hungary
- P02 Cleavage of kininogen and subsequent bradykinin release by MASP-1**
József Dobó¹, Balázs Major¹, Katalin A. Kékesi², István Szabó¹, Gábor Juhász³, Péter Závodszy¹, Péter Gál¹
¹Institute of Enzymology, Biological Research Center, Hungarian Academy of Sciences, Budapest, Hungary
²Department of Physiology and Neurobiology, Eötvös Loránd University, Budapest, Hungary
³Laboratory of Proteomics, Institute of Biology, Eötvös Loránd University, Budapest, Hungary
- P03 M-ficolin, a monocyte pathogen-associated molecular pattern (PAMP) recognition molecule (PRM)**
Steffen Thiel, Troels R. Kjær, Thomas Wittenborn, Eva L. Petersen, Jens C. Jensenius
Department of Medical Microbiology and Immunology, Bartholin Building, University of Aarhus, Aarhus, Denmark
- P04 Purification and characterisation of H-ficolin**
Rikke M. Zacho, Lisbeth Jensen, Steffen Thiel, Jens C. Jensenius
University of Aarhus, Medical Microbiology and Immunology
- P05 Expression and functional characterization of the serpin domain of human C1 Inhibitor**
Véronique Rossi¹, Isabelle Bally¹, Yuanyuan Xu², Véronique Frémeaux-Bacchi³, Romain Vives¹, Sarah Ancelet¹, Gérard J. Arlaud¹
¹Institut de Biologie Structurale, Grenoble, France
²University of Alabama, Birmingham, AL, USA
³Hôpital Européen Georges Pompidou, Paris, France
- P06 Human pentraxin 3 binds the complement regulators factor H and C4b-binding protein**
Anne Braunschweig, Mario Hebecker, Mihály Józsi
Junior Research Group Cellular Immunobiology, Leibniz Institute for Natural Product Research and Infection Biology – Hans Knöll Institute, Jena, Germany
- P07 Towards the crystal structure of intact human complement factor I**
Pietro Roversi¹, Steven Johnson¹, Stefanos Tsiftoglou², Ling Chiau-Chow², Tony Willis², Alister Dodds², Bob Sim^{2,3}, Susan Lea¹
¹Sir William Dunn School of Pathology, Oxford University, Oxford, UK
²Department of Biochemistry, Oxford University, Oxford, UK
³Department of Pharmacology, Oxford University, Oxford, UK
- P08 Compact structure of the central portion of factor H**
Christoph Q. Schmidt¹, Andrew P. Herbert¹, Elisavet Makou¹, Ilias Matis¹, Haydyn D. Mertens², Dmitry I. Svergun², Arthur Rowe³, Paul N. Barlow¹
¹Edinburgh Biomolecular NMR Unit, University of Edinburgh, Edinburgh, UK
²EMBL Hamburg Outstation, Hamburg, Germany
³School of Biosciences, University of Nottingham, Nottingham, UK

- P09 **Structural comparison between functional sites 1 and 2 of complement receptor type 1**
Mara Guariento¹, Juraj Bella¹, Christoph Q. Schmidt¹, Richard Hauhart², Thomas Allen², John P. Atkinson², Paul N. Barlow¹
¹Schools of Chemistry and Biological Sciences, Joseph Black Chemistry Bldg, University of Edinburgh, UK
²Washington University School of Medicine, Division of Rheumatology, St. Louis, MO, USA
- P10 **Structural and functional studies of a C5 inhibitor complex**
Nick S. Laursen¹, Lars Sottrup-Jensen¹, John Fraser², Gregers R. Andersen¹
¹Department of Molecular Biology, University of Aarhus, Aarhus, Denmark
²Maurice Wilkins Centre for Molecular Biodiscovery University of Auckland
- P11 **C1q inhibits immune complex induced IFN-alpha production in plasmacytoid dendritic cells – a novel link between C1q deficiency and SLE pathogenesis**
Christian Lood^{1,2}, Birgitta Gullstrand², Lennart Truedsson², Anders I. Olin³, Gunnar V. Alm⁴, Lars Rönnblom⁵, Gunnar Sturfelt¹, Majja-Leena Eloranta⁵, Anders A. Bengtsson¹
¹Department of Clinical Sciences, Section of Rheumatology, Lund University Hospital, Lund, Sweden
²Department of Laboratory Medicine, Section of Microbiology, Immunology and Glycobiology, Lund University, Lund, Sweden
³Department of Clinical Sciences, Section of Infection Medicine, Lund University, Lund, Sweden
⁴Department of Biomedical Sciences and Veterinary Public Health, Swedish University of Agricultural Sciences, Uppsala, Sweden
⁵Department of Medical Sciences, Uppsala University, Uppsala, Sweden
- P12 **MASP2 and MBL2 gene polymorphisms in a Brazilian population**
N.R. Ferraroni¹, S. Crovella S.^{2,3}, R.L. Guimarães³, L.A.C. Brandão³, C. Alves¹, L. Segat^{2,3}, R.N. Constantino-Silva¹, I.M. Siqueira⁴, C. Loja⁴, A.J.S. Duarte¹, A.S. Grumach¹
¹Laboratory of Dermatology and Immunodeficiencies, Department of Dermatology, Faculty of Medicine, University of São Paulo, São Paulo, Brazil
²Genetic Service and Department of Developmental and Reproductive Sciences, IRCCS Burlo Garofolo and University of Trieste, Trieste, Italy
³Department of Genetics, Federal University of Pernambuco, Recife, Brazil
⁴Hospital dos Servidores do Estado do Rio de Janeiro, Rio de Janeiro, Brazil
- P13 **The activability of MBL-MASP2 in hereditary angioedema**
Dorottya Csuka¹, Andrea Kocsis², Péter Gál², Henriette Farkas¹, Lilian Varga¹
¹Semmelweis University, 3rd Department of Internal Medicine, Budapest, Hungary
²Institute of Enzymology, Budapest, Hungary
- P14 **Human C3 deficiency shares characteristics with common variable immune deficiency**
Arije Ghannam¹, Denis Gerlier², Christian Drouet¹
¹GREPI/TIMC-IMAG CNRS 5525, CHU Grenoble, Grenoble, France
²Laboratoire VirPath, CNRS FRE 3011, Faculté RTH Laennec, Lyon, France
- P15 **Novel C3 mutation associated with MPGN2/DDD in a multiple-affected pedigree**
Rubén Martínez-Barricarte¹, Francisco Valdés Cañedo², Tamara Montes¹, Agustín Tortajada¹, Sheila Pinto¹, Margarita López-Trascasa³, Claire L. Harris⁴, Santiago Rodríguez de Córdoba¹
¹Centro de Investigaciones Biológicas, Consejo Superior de Investigaciones Científicas, Centro de Investigación Biomédica en Enfermedades Raras and Instituto Reina Sofía de Investigaciones Nefrológicas, Madrid, Spain
²Hospital Juan Canalejo, Coruña, Spain

³Unidad de Inmunología, Hospital Universitario de La Paz, Madrid, Spain

⁴Department of Medical Biochemistry and Immunology, School of Medicine, Cardiff University, Cardiff, UK

- P16 **Properdin deficiency associated with recurrent otitis media and pneumonia**
Lone Schejbel, Vibeke Rosenfeldt, Hanne Marquart, Niels Henrik Valerius, Peter Garred
Laboratory of Molecular Medicine, Department of Clinical Immunology, Rigshospitalet and Department of Pediatrics, Hvidovre Hospital, Copenhagen, Denmark
- P17 **Complement component C7 deficiency in four Irish families: The characterisation of a large genomic deletion within the C7 gene**
A.D. Thomas¹, A.G. Roberts¹, N. Chuzhanova², D.N. Cooper², C. Feighery⁴, J. Connaughton³, B.P. Morgan¹, A. Orren¹
¹Department of Medical Biochemistry, Cardiff University and University Hospital of Wales, Cardiff, UK
²Institute of Medical Genetics, Cardiff University, Cardiff, UK
³Department of Medicine, Midland Regional Hospital at Port Laoise, Co Laois, Ireland
⁴Department of Immunology, Trinity College Dublin, Ireland
- P18 **Arg¹²⁷ of complement regulatory protein factor H is important for its secretion from human fibroblasts**
José Antonio Tavares Albuquerque, Dayseanne Araújo Falcão, Lourdes Isaac
Department of Immunology, Institute of Biomedical Sciences, University of São Paulo, Brazil
- P19 **Analysis of the complement system in human lymph**
P. Macor¹, L. De Maso¹, T.N. Hoel², A.E. Fiane², T.E. Mollnes², F. Tedesco¹
¹Department of Life Sciences, University of Trieste, Trieste, Italy
²Institute of Immunology, Rikshospitalet University Hospital, Oslo, Norway
- P20 **Influence of IgG allotypes on defense against *Haemophilus influenzae* type b in children – a complement-dependent mechanism?**
L. Skattum¹, B. Gullstrand¹, G. Jönsson², L. Truedsson¹
¹Department of Laboratory Medicine, Lund, Section MIG, Lund University
²Department of Infection Medicine, Lund University Hospital, Lund, Sweden
- P21 **Targeted inhibition of the alternative pathway of complement with Complement Receptor 2-factor H protein attenuates collagen antibody-induced arthritis in mice**
Nirmal K. Banda¹, Brandt Levitt¹, Magdalena J. Glogowska¹, Joshua M. Thurman², Kazuo Takahashi³, Gregory L. Stahl⁴, Stephen Tomlinson⁵, William P. Arend¹, V. Michael Holers¹
¹Division of Rheumatology, University of Colorado Denver, School of Medicine, Aurora, CO
²Division of Nephrology and Hypertension, University of Colorado Denver, School of Medicine, Aurora, CO
³Developmental Immunology, Massachusetts General Hospital for Children, Boston, MA
⁴Brigham and Women's Hospital, Boston, MA
⁵Department of Microbiology and Immunology, Medical University of South Carolina, Charleston, SC
- P22 **Serum levels of mannose binding lectin are associated with carotid intima-media thickness in patients with rheumatoid arthritis**
Lone N. Troelsen, Peter Garred, Buris Christiansen, Christian Torp-Pedersen, Ib J. Christensen, Eva Narvestad, Søren Jacobsen
Laboratory of Molecular Medicine, Department of Clinical Immunology, Rigshospitalet, Copenhagen University Hospital, Denmark

- P23 **The cartilage-specific collagen IX and its role in modulation of the complement activity**
Nikolina Kalchishkova¹, Dick Heinegård², Anna Blom¹
¹Department of Laboratory Medicine, Wallenberg Laboratory, University Hospital Malmö, Lund University, Sweden
²Department of Experimental Medical Science, BMC, Lund University, Sweden
- P24 **Mechanisms of meconium-induced innate immune-reactions: role of complement and CD14/TLR4/MD-2**
Bodil Salvesen^{1,2}, Carlo Rossetti³, Tom Eirik Mollnes¹
¹Institute of Immunology and
²Department of Pediatric Research, Medical Faculty, University of Oslo, and Oslo University Hospital, Rikshospitalet, Oslo, Norway
³University of Insubria, Varese, Italy
- P25 **Role of C1q in ethanol-induced liver injury in mice**
Jessica I. Cohen, Sanjoy Roychowdhury, Megan R. McMullen, Abram B. Stavitsky, Laura E. Nagy
 Cleveland Clinic, Pathobiology, Cleveland, USA
- P26 **Anti-DNA antibodies with Ig G isotype override early regulation points of the complement cascade and induce abundant C3 generation**
Krisztián Papp¹, Péter Végh², Anna Erdei^{1,2}, József Prechl¹
¹Immunology Research Group, Hungarian Academy of Sciences, at
²Department of Immunology, Eötvös Loránd University, Budapest, Hungary
- P27 **Complement activation in human non-alcoholic fatty liver disease**
Sander S. Rensen¹, Yanti Slaats¹, Ann Driessen², Carine J. Peutz-Kootstra², Jeroen Nijhuis¹, Jan Willem Greve¹, Wim A. Buurman¹
¹Department of Surgery and
²Department of Pathology, Nutrition and Toxicology Research Institute Maastricht, Maastricht University Medical Centre, Maastricht, the Netherlands
- P28 **Inter alpha inhibitor (IaI) inhibits classical complement pathway at C1 level**
Marcin Okroj, Jonatan Sjölander, Leticia Corrales, Anna M. Blom
 Lund University, Medical Protein Chemistry
- P29 **Reactivity of MASP-1 and MASP-2 with serum protease inhibitors**
Madeleine E. Gentle¹, Péter Gál², Robert B. Sim¹
¹MRC Immunochemistry Unit, Oxford University, UK
²Institute of Enzymology, Hungarian Academy of Sciences, Budapest, Hungary
- P30 **Selective inhibition of the lectin pathway of the complement system**
Andrea Kocsis¹, Péter Závodszy¹, Gábor Pál^{2,3}, Péter Gál^{1,3}
¹Institute of Enzymology, Hungarian Academy of Sciences, Budapest, Hungary
²Eötvös Loránd University, Budapest, Hungary
- P31 **Mannose-binding lectin induces opsonin-like activity of PTX3 and SAP in innate defense against *Candida albicans***
Ying Jie Ma, Andrea Doni, Christian Honoré, Maiken Arendrup, Alberto Mantovani, Peter Garred
 Laboratory of Molecular Medicine, Department of Clinical Immunology, Rigshospitalet, Copenhagen, Denmark, Istituto Clinico Humanitas, Rozzano, Milan, Italy and Unit of Mycology, Statens Serum Institut, Copenhagen, Denmark

- P32 Complement mediated enhancement of Friend Virus specific CTL response by B cells in vitro**
C.G. Bila, A. Ejaz, V. Oberhauser, M.P. Dierich, H. Stoiber, Z. Bánki
 Department of Hygiene, Microbiology and Social Medicine, Innsbruck Medical University, Innsbruck, Austria
- P33 Role of complement in virus-specific CTL response induced by bone-marrow derived DCs**
Z. Bankl¹, C.G. Ammann², A. Ejaz¹, U. Dittmer³, K. Hasenkrug², M.P. Dierich¹, H. Stoiber¹, D. Wilflingseder¹
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²Laboratory of Persistent Viral Diseases, Rocky Mountain Laboratories, Hamilton, MT, USA
³Institute of Virology, University of Duisburg-Essen, Essen, Germany
- P34 Complement activation by proposed biomaterials intended for composition of a glucose sensor**
Andrey Sokolov, Bernt Christian Hellerud, Anne Pharo, Erik Johannessen, Tom Eirik Mollnes
 Institute of Immunology, Rikshospitalet University Hospital, Norway, University of Oslo, Norway
- P35 Binding of complement proteins to activated platelets is independent of complement activation**
Osama Hamad¹, Per Nilsson², John D. Lambris³, Kristina N. Ekdahl^{1,2}, Bo Nilsson¹
¹Division Clinical Immunology, Rudbeck Laboratory, University Hospital, Uppsala, Sweden
²School of Pure and Applied Natural Sciences, Kalmar University, Kalmar, Sweden
³Department of Pathology and Laboratory Medicine, University of Pennsylvania, USA
- P36 The effect of long-term danazol therapy on the serum levels of complement proteins and attack frequency in hereditary angioedema**
Lilian Varga, Dorottya Csuka, George Füst, Henriette Farkas
³rd Department of Internal Medicine, Semmelweis University, Budapest, Hungary
- P37 Fresh serum induces release of immunostimulatory lipoproteins from *Staphylococcus aureus***
Kang Hee Jung¹, Ha Jeong-mi¹, Lee Haneulnari¹, Kenji Kurokawa², Lee Bok Luel²
¹Dept. of Laboratory Medicine, Hallym University College of Medicine
²National Research Laboratory of Defense Proteins, College of Pharmacy, Pusan National University
- P38 Ligands for factor H on the surface of apoptotic cells**
Jonatan Leffler¹, Eva Norström¹, Andrew P. Herbert², Paul N. Barlow², Anna M. Blom¹, Myriam Martin¹
¹Lund University, Malmo, Sweden
²University of Edinburgh, Edinburgh, UK
- P39 Comparison of C5a receptor expression and function on two U937 cell lines**
Elizabeth A. Palmer, Matthew I. Stott, Carmen W. van den Berg
 Department of Pharmacology, Oncology and Radiology, Cardiff University, School of Medicine, Cardiff, UK

- P40 **Specific collaboration between rat membrane complement regulators, Crry and CD59, protects peritoneum from damage by autologous complement activation in peritoneal dialysate fluid**
Tomohiro Mizuno¹, Masashi Mizuno², B. Paul Morgan³, Noriko Okada⁴, Yukihiko Noda¹, Yukio Yuzawa², Seiichi Matsuo², Yasuhiko Ito²
¹Meijo University Graduate School of Pharmaceutical Sciences, Nagoya, Japan
²Nagoya University Graduate School of Medicine, Nagoya, Japan
³School of Medicine, Cardiff University, Cardiff, UK
⁴Nagoya City University, Nagoya, Japan
- P41 **Expression of CD59, a complement inhibitor, by freshly isolated and frozen-stored amniotic membrane cells**
Á. Füst¹, É. Pállinger², A. Stündl¹, L. Imre¹
¹Department of Ophthalmology, Semmelweis University, Budapest, Hungary
²Research Group for Inflammation Biology and Immunogenomics of Hungarian Academy of Sciences and Semmelweis University, Budapest, Hungary
- P42 **Transcription of key components of complement and the TLR-signaling system is down-regulated by LPS in a porcine model of meningococcal sepsis**
B.C. Hellerud^{1,3}, O.K. Olstad³, P. Brandtzaeg¹, T.E. Mollnes²
¹Department of Pediatrics, and
²Department of Clinical Chemistry, Ullevål University Hospital, and
³Institute of Immunology, Rikshospitalet University Hospital, University of Oslo, Norway
- P43 **AMD associated Y402H polymorphism affects binding of the complement regulator mCRP and results in an altered complement control on necrotic ARPE-19 cells**
Nadine Lauer¹, Michael Mihlan¹, Bernhard H.F. Weber², Frank Sühnel³, Claudia v. Strachwitz⁴, Andrea Hartmann¹, Peter F. Zipfel^{1,5}, Christine Skerka¹
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²University of Regensburg, Institute of Human Genetics, Regensburg, Germany
³Leibniz Institute for Age Research, Jena, Germany
⁴University Hospital Würzburg, Germany
⁵Friedrich Schiller University, Jena, Germany
- P44 **Factor H controls spontaneous complement activation on mouse endothelial cells**
Ryan Goldberg, Brandon Renner, Claudia Amura, Viviana P. Ferreira, Claudio Cortes, Michael K. Pangburn, Stephen Tomlinson, V. Michael Holers, Joshua M. Thurman
 University of Colorado Denver, Department of Medicine, CO, USA
 University of Texas Health Science Center at Tyler, Department of Biochemistry, TX, USA
 Medical University of South Carolina, Department of Microbiology and Immunology, USA
- P45 **Low MBL is a major risk factor for severe infections occurring early after allogeneic HSCT**
Osthoff Michael¹, Rovò Alicia², Stern Martin², Danner Doris¹, Tichelli André², Trendelenburg Marten¹
¹Clinical Immunology Lab
²Division of Hematology, University Hospital Basel, Basel, Switzerland
- P46 **Inhibition of the terminal pathway by Complement Regulator-Acquiring Surface Protein 1 of *Borrelia burgdorferi***
Teresia Hallström¹, Corinna Siegel², Peter Kraiczky², Christine Skerka¹, Peter F. Zipfel^{1,3}

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P47 OSpE of *Borrelia burgdorferi* and FhbA of *B. hermsii* bind factor H domain 20 via overlapping binding sites

*T. Meri*¹, *M.J. Lehtinen*¹, *J.V. McDowell*², *K.M. Hovis*², *S. Meri*¹, *I.J.T. Seppälä*¹, *R. Marconi*², *T.S. Jokiranta*¹

¹Haartman Institute, Department of Bacteriology and Immunology, University of Helsinki, Finland

²Department of Microbiology and Immunology, Medical College of Virginia at Virginia Commonwealth University, Richmond, USA

P48 Ectopic expression of CRASP-1 orthologs of diverse serum-resistant borreliae efficiently protect serum-sensitive *Borrelia garinii* from complement-mediated lysis by interacting with human complement factor H and FHL1

*Claudia Hammerschmidt*¹, *Corinna Siegel*¹, *Christine Skerka*², *Reinhard Wallich*³, *Peter F. Zipfel*², *Peter Kraiczky*¹

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³Institute of Immunology, University of Heidelberg, Heidelberg, Germany

P49 The Streptococcal-collagen-like protein (Scl) of *S. pyogenes* M6 and M55, binds Factor H and CFHR-1 via the C-terminus

*Michael Reuter*¹, *Steffi Hälbich*¹, *Clayton C. Caswell*², *Slawomir Lukomski*², *Peter F. Zipfel*^{1,3}

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P50 Identification of the main binding site of *Bordetella pertussis* on factor H domains 19-20

*Hanne Amdahl*¹, *Hanna Jarva*^{1,2}, *Quishui He*³, *Jussi Mertsola*⁴, *Sakari Jokiranta*¹, *Seppo Meri*^{1,2}

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²Huslab and Helsinki University Central Hospital, Helsinki, Finland

³Pertussis Reference Laboratory, National Public Health Institute, Turku, Finland

⁴Department of Pediatrics, Turku University Hospital, Turku, Finland

P51 Immune evasion of the human pathogenic yeast *Candida albicans*: *Candida* CRASP-2 blocks the complement cascade at multiple steps

*Shanshan Luo*¹, *Andrea Hartmann*¹, *Hans-Martin Dahse*¹, *Christine Skerka*¹, *Peter F. Zipfel*^{1,2}

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²Friedrich-Schiller-University, Jena, Germany

- P52 **Mannose-Binding Lectin complement pathway plays a key role in complement activation by *Paracoccidioides brasiliensis***
*Renan G. Toledo*¹, *Wilmar D. da Silva*¹, *Vera L.G. Calich*², *Thereza L. Kipnis*¹
 “In Memoriam” to *Thereza L. Kipnis*¹, a dedicated Immunology Professor who developed active research programs that engaged students.
¹Centro de Bociências e Biotecnologia, Universidade Estadual do Norte Fluminense, RJ, Brazil
²Departamento de Imunologia, Instituto de Ciências Biomédicas, Universidade de São Paulo, SP, Brazil
- P53 **Complement evasion of the scabies mite *Sarcoptes scabiei***
*K. Fischer*¹, *F. Bergström*³, *S. Reynolds*¹, *C. Willis*¹, *M. Johnstone*¹, *A. Mika*¹, *C. Langendorf*², *A.M. Buckle*², *R.N. Pike*², *A.M. Blom*³, *D.J. Kemp*¹
¹Infectious Diseases and Immunology Division, Queensland Institute of Medical Research, Brisbane, Australia
²Biochemistry and Molecular Biology, Monash University, Melbourne, Australia
³Department of Clinical Chemistry, University Hospital Malmö, Lund University, Malmö, Sweden
- P54 **Fibrinogen binding sites P336 and Y338 of Clumping factor A (ClfA) alter Factor I mediated cleavage of C3b to iC3b**
P.S. Hair, T.J. Foster, K.M. Cunnion
 Department of Pediatrics, Eastern Virginia Medical School, Children’s Specialty Group, Children’s Hospital of The King’s Daughters, Norfolk, Virginia, USA
 Department of Molecular Microbiology, Trinity College, University of Dublin, Dublin, Ireland
- P55 **Snake venoms of the Bothrops genus activate complement by cleaving C1-inhibitor, C3 and C4**
*Giselle Pidde-Queiroz*¹, *Maria de Fátima Furtado*², *Carlos F. Filgueiras*¹, *Mônica Spadafora-Ferreira*¹, *Carmen W. van den Berg*³, *Denise V. Tambourgi*¹
¹Immunochemistry and
²Herpetology Laboratories, Instituto Butantan, São Paulo, Brazil
³Cardiff University, Cardiff, UK
- P56 **C1 activation by enzymatically modified low-density lipoprotein involves free lipids released by cholesterol esterase treatment**
Adrienn Biro, Gérard J. Arlaud
 Institut de Biologie Structurale, Laboratoire d’Enzymologie Moléculaire, Grenoble, France
- P57 **The correlation of C3 to atherosclerosis and atherosclerosis risk factors**
*P. Thorbjornsdottir*¹, *S.T. Sigurdarson*², *S. Bodvarsson*², *G. Thorgeirsson*², *G.J. Arason*¹
¹Dept. Immunol and
²Medicine, Landspítali University Hospital, Reykjavik, Iceland
- P58 **Preferential uptake of amyloid beta 1-42 oligomers by primary human astrocytes in vitro: influence of SAP and C1q.**
*H.M. Nielsen*¹, *S.D. Mulder*¹, *R. Veerhuis*^{1,2}
¹Departments of Clinical Chemistry and Alzheimer Center AND
²Pathology and Psychiatry, VU University Medical Centre Amsterdam, Amsterdam, The Netherlands

- P59 **Therapeutic targeting of classical and lectin pathways of complement protects from ischemia-reperfusion induced renal damage inhibiting the activation of dendritic cells**
G. Castellano¹, C. Curci¹, D. Racaniello¹, R. Melchiorre¹, A. Loverre¹, V. Montinaro¹, M. Rossini¹, M. Mannesse³, M.R. Daha², P. Dittono¹, M. Battaglia¹, A. Crovace¹, F.P. Schena¹, G. Grandaliano¹
¹Dept. of Emergency and Organ Transplantation, University of Bari, Italy
²Dept. of Nephrology, Leiden, The Netherlands
³Pharming, BV, Leiden, The Netherlands
- P60 **Systemic and intrathecal complement activation in multiple sclerosis and Guillan-Barré Syndrome**
Kristina N. Ekdahl^{1,2}, Carolina Blomberg¹, Anna J. Henningsson³, Charlotte Dahle⁴, Irene Håkansson⁵, Kerstin Sandholm¹, Jan Ernerudh⁴
¹School of Pure and Applied Natural Sciences, Kalmar University, Kalmar, Sweden
²Div. Clinical Immunology, Rudbeck Laboratory, University hospital, Uppsala, Sweden
³Dept. of Infectious Diseases, Ryhov County Hospital, Jönköping, Sweden
⁴Dept. of Clinical Experimental Medicine, Div of Clinical Immunology, Linköping, Sweden
⁵Dept. of Clinical Experimental Medicine, Div of Neurology, Linköping, Sweden
- P61 **Crry deficiency switches the resting microglial phenotype to the primed state**
Valeria Ramaglia¹, Timothy R. Hughes¹, Rossen M. Donev¹, James Neal², B. Paul Morgan¹
¹Department of Medical Biochemistry and Immunology and
²Department of Histopathology, School of Medicine, Cardiff University, Cardiff, UK
- P62 **Modified antibody fragments? A new method for targeting pathogens for improved lysis?**
Georg Huber, Zoltan Banki, Heribert Stoiber
 Department for Hygiene and Medical Microbiology, Medical University Innsbruck, Austria
- P63 **Targeting sites of complement activation by engineering selective drug delivery**
Marieta M. Ruseva, B. Paul Morgan, Claire L. Harris
 Department of Medical Biochemistry and Immunology, School of Medicine, Cardiff University
- P64 **Therapeutic inhibition of MAC by a C5-specific inhibitor (OmCI) engineered for extended half-life in vivo**
Marieta M. Ruseva¹, Miles A. Nunn², B. Paul Morgan¹, Claire L. Harris¹
¹Department of Medical Biochemistry and Immunology, School of Medicine, Cardiff University
²Natural Environment Research Council Centre for Ecology and Hydrology, Oxford
- P65 **Controlled modulation of factor H and D**
Kumar Shah
 Endocrine Technology, L.L.C., Clinical Research Department, Brooklyn, USA
- P66 **Induction of complement-mediated lysis on the surface of HIV by fH-derived SCRs**
Daniela Windisch, Heribert Stoiber
 Institute of Hygiene and Social Medicine and L. Boltzmann Institute for AIDS Research, Innsbruck Medical University, Innsbruck, Austria
- P67 **Overcoming the resistance of HIV against complement-mediated lysis**
Susanne Lengauer, Heribert Stoiber
 Institute of Hygiene and Social Medicine and L. Boltzmann Institute for AIDS Research, Innsbruck Medical University, Innsbruck, Austria

- P68 **SCR1/2 of C4bp induces lysis of *N. gonorrhoeae***
Renate Hörbiger, Heribert Stoiber
 Institute of Hygiene and Social Medicine and L. Boltzmann Institute for AIDS Research,
 Innsbruck Medical University, Innsbruck, Austria
- P69 **Insights into the role of complement dysregulation in atypical haemolytic uremic syndrome**
E. Goicoechea de Jorge¹, H.T. Cook², M. Botto¹, M.C. Pickering¹
¹Molecular Genetics and Rheumatology Section and
²Department of Histopathology, Faculty of Medicine, Imperial College, Hammersmith Campus, London, UK
- P70 **Further evidence for a paradoxical role of the alternative pathway C3 convertase in atypical Haemolytic Uremic Syndrome**
Lubka Roumenina¹, Mathieu Cayla¹, Christophe Hue¹, Sylvain Bigot², Simon Satchell³, Peter Mathieson³, Chantal Loirat⁴, Catherine Sautes-Fridman¹, Marie-Agnes Dragon-Durey^{1,5}, Lise Halbwachs-Mecarelli², Veronique Fremeaux-Bacchi^{1,5}
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³Academic Renal Unit, University of Bristol, Southmead Hospital, Bristol, UK
⁴Service de Néphrologie Pédiatrique, Hôpital Robert-Debré, Paris, France
⁵Assistance Publique-Hopitaux de Paris, Hopital Europeen Georges-Pompidou, Service d'Immunologie Biologique, Paris, France
- P71 **Complement activation by endothelial cells treated with inflammatory cytokines or heparin, in the context of atypical Hemolytic Uremic Syndrome**
Marie Frimat¹, Lubka Roumenina², Laurent Camous¹, Sylvain Bigot¹, Philippe Lesavre¹, Simon C. Satchell³, Peter W. Mathieson³, Véronique Frémeaux-Bacchi², Lise Halbwachs-Mecarelli¹
¹INSERM U845, Necker Hospital
²Cordeliers Research Center, INSERM UMRS 872, Paris, France
³Academic Renal Unit, Southmead Hospital, Bristol, UK
- P72 **Profiles of complement activation during liver reperfusion in patients with atypical hemolytic uremic syndrome or other indications for liver transplantation**
Aino Koskinen¹, Eija Tukiainen², Arno Nordin², Heikki Mäkisalo², Krister Höckerstedt², Helena Isoniemi², T. Sakari Jokiranta¹
¹Haartman Institute, Department of Bacteriology and Immunology, University of Helsinki, Helsinki, Finland
²Transplantation and Liver Surgery Clinic, Helsinki University Central Hospital, Helsinki, Finland
- P73 **Factor H autoantibodies associated with atypical hemolytic uremic syndrome crossreact with factor H-related protein 1**
Stefanie Strobel¹, Pilar Sánchez-Corrales³, Cynthia Abarrategui-Garrido³, Elena Fariza Requejo³, Peter F. Zipfel^{2,4}, Mihály Józsi¹
¹Junior Research Group Cellular Immunobiology and
²Department of Infection Biology, Leibniz Institute for Natural Product Research and Infection Biology – Hans Knöll Institute, Jena, Germany
³Research Unit, Hospital Universitario La Paz, Madrid, Spain
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- P74 aHUS-associated genetic complement abnormalities cause C3 deposition on endothelial cells: protective effects of specific inhibitors of the alternative pathway of complement**
Sara Gastoldi¹, Miriam Galbusera¹, Woodruff Emlen², V. Michael Holers², Federica Banterla¹, Roberta Donadelli¹, Giuseppe Remuzzi¹, Marina Noris¹
¹Mario Negri Institute for Pharmacological Research, Bergamo, Italy
²Taligen Therapeutics, Aurora, CO & Boston, MA, USA
- P75 Impaired protection of erythrocytes from complement attack in aHUS can be caused by C-terminal mutations of factor H**
Hannah Söderholm, Markus J. Lehtinen, Aino Koskinen, T. Sakari Jokiranta
 Dept. of Bacteriology and Immunology, Haartman Institute, Univ. of Helsinki, Helsinki, Finland
- P76 Factor H mutations in SCR1-4 and SCR6-9 are equally important genetic susceptibility factors for atypical Haemolytic Uraemic Syndrome as the mutations in SCR 19-20**
Lubka Roumenina¹, Marie Frimat², Fadi Fakhouri³, Chantal Loirat⁴, Sylvain Bigot², Catherine Sautes-Fridman¹, Lise Halbwachs-Mecarelli², Véronique Frémeaux-Bacchi^{1,5}
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²INSERM U845, Hôpital Necker, Paris, France
³Molecular Genetics and Rheumatology Section, Faculty of Medicine, Imperial College, Hammersmith Campus, London, UK
⁴Service de Néphrologie Pédiatrique, Hôpital Robert-Debré, Paris, France
⁵Assistance Publique-Hopitaux de Paris, Hôpital Européen Georges-Pompidou, Service d'Immunologie Biologique, Paris, France
- P77 Acquired and hereditary complement dysregulation in patients with C3 glomerulopathy**
Lubka Roumenina¹, Aude Servais², Fadi Fakhouri³, Jacques Blouin⁴, Marie-Agnes Dragon-Durey^{1,4}, Laure-Hélène Noël⁵, Véronique Frémeaux-Bacchi^{1,4}
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²Assistance Publique-Hopitaux de Paris, Hopital Necker Enfants Malades, Service de Nephrology, Paris, France
³Molecular Genetics and Rheumatology Section, Faculty of Medicine, Imperial College, Hammersmith Campus, London, UK
⁴Assistance Publique-Hopitaux de Paris, Hopital Européen Georges-Pompidou, Service d'Immunologie Biologique, Paris, France
⁵INSERM U 845, Hopital Necker Enfants Malades, Paris, France
- P78 Association of monoclonal gammopathy, cryoglobulinemia and nutritive hypersensitivity with C1-inhibitor deficiency**
Olivera Savić, Ivana Jagličić
 Blood Transfusion Institute of Serbia, Immunochemistry Department, Belgrade, Serbia
- P79 Three-plex bead based immunoassay for measurement of serum MBL, Ficolin-2 and Ficolin-3 – in one sample**
Jakob Thaning Bay, Peter Garred
 Laboratory of Molecular Medicine, Department of Clinical Immunology, Rigshospitalet, Copenhagen, Denmark
- P80 An immunoassay for the assessment of total alternative pathway activity**
N. de Forest, J. DeTorres, D. Baker, C. Duncan, N. Nasser
 Specialty Products Group (SPG), Quidel Corporation, San Diego, CA, USA

P81 Towards a highly specific factor H ELISA for rapid screening of patient sera

Scott J. Staniforth¹, David Kavanagh², Lisa Strain², Timothy Goodship², Kevin J. Marchbank¹

¹Institute of Cellular Medicine, Newcastle University, UK and

²Institute of Human Genetics, Newcastle University, International Center for Life, UK

P82 Complement factor H polymorphism and Group A streptococcal infections

Karita Haapasalo-Tuomainen¹, Jaana Vuopio-Varkila², Tuula Siljander², Jaana Syrjänen³, Juha Kere⁴, T. Sakari Jokiranta¹

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⁴Department of Molecular Medicine and Surgery, Karolinska Institutet, Stockholm, Sweden



GENERAL INFORMATION

Internet Access

Those who have laptops may use the wifi of the venue hotel free of charge. Participants, not possessing a laptop, may use one of the emails terminals available in room “Jade” at the lobby level.

Transportation

Free transportation will be provided between Budapest Ferihegy Airport – Visegrád (conference venue) – Budapest Ferihegy Airport. Please, make sure to subscribe for the suitable transfer list on spot at the registration desk.

Time schedule

Friday – Saturday, September 4 & 5, (Budapest – Visegrád)

At 10:30, 13:00, 15:30, 17:30, 19:00, 20:45

Departures from Ferihegy Airport Terminal 1, 2A, 2B (parking lot!). Hostesses will be at your assistance at the arrival levels.

Tuesday, 8 September (Visegrád – Budapest)

At 13:00, right after the conference and 14:00 and approximately at 19:00 after the excursions. Those who take part in the Szentendre excursion, they go immediately to the airport from Szentendre (as this town is half way between Visegrád and Budapest).

Wednesday, 9 September (Visegrád – Budapest)

There will be organised transportation to the Airport. Based on the flight details we got from the participants, we will depart three buses: at 4:00 early in the morning for flights between 7:00–8:30, at 8:00 for flights between 12:00–14:00 and the last one at 12:00 for later flights and for participants, not wishing to leave early.

Local Transportation

Morning transfers from Hotel Visegrád and Hotel Honti & Pension to the conference venue from 7:30 to 8:30 between 5–8 September, 2009.

Evening transfers from the conference venue to the conference hotels from 20:00 to 21:00 on 5 September, 2009.

At 19:00 (right after the sessions) on 6 September, 2009.

At 18:00 (right after the sessions) on 7 September, 2009.

SOCIAL PROGRAMME

Saturday, 5 September 2009

Welcome cocktail, 18:30

The official welcome cocktail of CHD2009 will be held on the Congress Venue: Thermal Hotel Visegrád. Admission is free for all registered delegates, accompanying persons and exhibitors.

Monday, 7 September 2009

Banquet, 19:00

The official closing banquet of CHD2009 will be held in the Renaissance restaurant with medieval programme. Admission is included in the registration fees. Dress code is casual (please take a warmer pullover with you, as evenings are colder in September).

Description of the evening:

- Knights' tournament
- Guests are greeted by the royal servant with drink and can take a sit on the covered grandstand in the court of the Solomon's Tower. The knight of the St. George Order gives brief information about the building of the tower, about its usage in the Middle Ages and about the activity of the order of knighthood.
- From our guests we choose a king and a queen. We give them royal cloak and they take a seat on the throne.
- The knights demonstrate medieval weapons target practice with lance and battlestar, club, (archery on both target and alive target).
- The highlight of the show is the knights' tournament. During the single combat the knights demonstrate the small arms of that age (battle, broadsword, sabre, club, lance).
- At the end of the show all of the knights take part in the mass battle-scene.
- At the end of the show guests can walk down (150 metres) to a Renaissance Restaurant where a Royal Feast is will crown the evening.

Tuesday, 8 September 2009

Sightseeing tour, 14:00–18:00

After the conference, 2 parallel sightseeing will be organised. The sightseeing is included in the registration fees, but the participation is not automatic.

Please choose only 1 of the 2 offered tours.

After the sightseeing (appr. at 19:00) transfer will be provided to Budapest airport, for those who have late flight on this day.

Szentendre sightseeing

Szentendre, the most picturesque little town along the Hungarian stretch of the Danube, and home to sculptors and painters, is not likely to forget it. The town is a charming monument to the XVIIIth century, with its undulating cobbled streets and unexpected alleyways, and if it exudes something of a Mediterranean atmosphere then that's probably thanks to the Serbs, Dalmatians and Greek who settled here from the XIVth century onwards. Hungary's largest open-air ethnological museum, or skanzen, is situated at the edge of the town. Its old peasant houses, church and handicraft workshop will be also visited during the sightseeing.

Esztergom sightseeing

Esztergom, Hungary's ecclesiastical center and seat of the Roman Catholic Archbishop, the Basilica and the walls of the ancient castle rise imposingly on the Danube's right bank.

The Basilica, as well as being Hungary's largest church, is noteworthy for its remarkable altarpiece depicting the Assumption, which is the largest single-canvas oil-painted altarpiece in the world. The church's stately interior contains Hungary's finest complete Renaissance monument, the Bakócz Chapel, built from red marble. The Cathedral Treasury is the richest in Hungary.



