



WEDNESDAY, OCTOBER 29

MORNING

ROOM A

PLENARY SESSION: EFFECTOR MECHANISMS

Chairs: **A. Sharpe, T. Yamamura**

| | | |
|-------------|--|------------------|
| 08.30-09.10 | Transcriptional regulation of inflammatory T cell differentiation | Dan Littman |
| 09.10-09.50 | Interplay of pathogenetic Th 17 and regulatory T cells in CNS autoimmunity | Vijay Kuchroo |
| 09.50-10.20 | COFFEE BREAK | |
| 10.20-11.00 | Role of PD-1, PD-L1 and their ligands in regulating T cell activation and tolerance | Arlene Sharpe |
| 11.00-11.40 | Orphan Nuclear Receptor NR4A2 and the inflammatory cascade in MS/EAE | Takashi Yamamura |
| 11.45-12.45 | LUNCH SYMPOSIUM-IMMUNO THERAPY: Rationale for the thymectomy trial in non-thymomatous myasthenias gravis | Gil Wolfe |
| 11.45-12.45 | ISNI MEMBERS GENERAL MEETING | |

BALLROOM

11.30-13.15 **POSTERS & LUNCH**

POSTER SESSION: CNS INFLAMMATION, PATHOGENESIS AND REGULATORY MECHANISMS

1 - DEVELOPMENT OF ALTERNATIVELY ACTIVATED MACROPHAGES IN THE CNS OF CRYPTOCOCCUS NEOFORMANS-INFECTED MICE DEPENDS CRUCIALLY ON IL-4 OR IL-13 AND IS ASSOCIATED WITH UNCONTROLLED CNS INFECTION -

Werner Stenzel^{*[1]}, Müller Uwe^[2], Brombacher Frank^[2], Köhler Gabriele^[4], Alber Gottfried^[2]

^[1]University Hospital of Cologne ~ Cologne ~ Germany - ^[2]College of Veterinary Medicine ~ Leipzig ~ Germany - ^[3]Institute of Infectious Disease and Molecular Medicine ~ Capetown ~ South Africa - ^[4]University Hospital of Münster ~ Münster ~ Germany

2 - EMMPRIN-DEPENDENT MATRIX METALLOPROTEINASE INDUCTION EXAMINED IN MURINE EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS (EAE) -

Agrawal Smriti^{*[1]}, Yong Wee^[1]

^[1]University of Calgary ~ Calgary ~ Canada

3 - CD8+ LYMPHOCYTE-MEDIATED INJURY OF CNS NEURONS: RELEVANCE OF GRANZYME B AND PERFORIN FOR ACUTE ELECTROPHYSIOLOGICAL CONSEQUENCES AND LONG-TERM NEUROTOXICITY -

Simon Ole J.^[1], Meuth Sven G.^[1], Herrmann Alexander M.^[1], Bittner Stefan^[1], Friedl Peter^[1], Budde Thomas^[2], Hünig Thomas^[1], Heckmann Manfred^[1], Wiendl Heinz^[1]

^[1]Julius-Maximilians-University ~ Würzburg ~ Germany - ^[2]Westfälische Wilhelms-University ~ Münster ~ Germany

4 - KININ RECEPTORS AGONISTS ATTENUATE NITRIC OXIDE PRODUCTION IN MICROGLIA -

Fleisher-Berkovich Sigal^{*[1]}, Ben-Shmuel Sarit^[1]

^[1]Ben-Gurion University ~ Beer-Sheva ~ Israel

5 - GENETIC INFLUENCE ON EXPRESSION OF COMPLEMENT SYSTEM COMPONENTS AFTER NERVE INJURY -

Lindblom Rickard^{*[1]}, Piehl Fredrik^[1], Diez Margarita^[1]

^[1]Karolinska Institutet ~ Stockholm ~ Sweden

6 - ROSIGLITAZONE ATTENUATES THE LPS-INDUCED INCREASE IN IL-1B VIA IL-4 RELEASE FROM ASTROCYTES -

Deighan Brian F.^{*[5]}, Griffin Rebecca^[5], Loane David J.^[4], Lynch Marina A.^[5]

^[4]Department of Neuroscience, Georgetown University Medical Centre ~ Washington DC ~ United States - ^[5]Trinity College Institute of Neuroscience, Trinity College Dublin, ~ Dublin ~ Ireland

7 - RECIPROCAL REGULATION OF ADENOSINE RECEPTOR EXPRESSION SENSITIZES ACTIVATED MICROGLIA TO ADENOSINE-MEDIATED INHIBITORY SIGNALS -

Van der Putten Céline^{*[4]}, Zuiderwijk-Sick Ella A.^[4], van Straalen Linda^[4], de Geus Eveline D.^[2], Boven Leonie A.^[2], Kondova Ivanela^[3], Ijzerman Ad P.^[5], Bajramovic Jeffrey J.^[4]

^[2]Department of Immunology, Erasmus MC ~ Rotterdam ~ Netherlands - ^[3]Animal Science Department, BPRC ~ Rijswijk ~ Netherlands - ^[4]Alternatives Unit, BPRC ~ Rijswijk ~ Netherlands - ^[5]Department of Pharmacology ~ Leiden/Amsterdam Center for Drug Research, Leiden ~ Netherlands

8 - MICRORNA PROFILES OF DIFFERENT TYPES OF MS LESIONS -

Junker Andreas^{*[4]}, Krumbholz Markus^[4], Eisele Sylvia^[4], Lassmann Hans^[3], Wekerle Hartmut^[5], Hohlfeld Reinhard^[4], Meinl Edgar^[4]

^[3]Center for Brain Research, Medical University of Vienna ~ Vienna ~ Austria - ^[4]Institute for Clinical Neuroimmunology, LMU ~ Munich ~ Germany - ^[5]Max-Planck Institute for Neurobiology ~ Munich ~ Germany

9 - PERCENTAGE OF REGULATORY T CELLS USED TO MONITOR INFLAMMATION IN THE CENTRAL NERVOUS SYSTEM IN COMPARISON TO SYSTEMIC CIRCULATION IN NEUROLOGICAL PATIENTS WITH INFECTION AND MULTIPLE SCLEROSIS -

Matsui Makoto^{*[1]}, Araya Shin-ichi^[1], Kitagawa Yoko^[1], Nakata Michiyo^[1]

^[1]Kanazawa Medical University ~ Uchinada ~ Japan

10 - THE INTERACTION OF SIGIRR AND IL-1F5; AN IMPORTANT NEUROMODULATORY SYSTEM -

Watson Melanie^{*[1]}, Lynch Marina^[1]

^[1]Trinity College Institute of Neuroscience ~ Dublin ~ Ireland

11 - CYTOKINE RELEASE BY MICROGLIA, ASTROCYTES, NEURONS AND A MIXED CULTURE IN A PNEUMOCOCCAL MENINGITIS CULTURE MODEL -

Al Jindan Reem^[1], Vallely Pamela^[2], Klapper Paul^[3]

^[1]Reem Y Al Jindan ~ School of Translational Medicine, University of Manchester ~ United Kingdom - ^[2]Pamela Vallely ~ School of Translational Medicine, University of Manchester ~ United Kingdom - ^[3]Paul Klapper ~ Clinical Virology, Central Manchester and Manchester Children's Hospital ~ United Kingdom

12 - DIFFERENTIATION OF PRIMARY ADULT MICROGLIA ALTERS THEIR RESPONSE TO TLR8-MEDIATED ACTIVATION BUT NOT THEIR CAPACITY AS APC -

Zuiderwijk-Sick Ella A.^[1], van der Putten Céline^[1], Bsibsi Malika^[2], Deuzing Ilona P.^[1], de Boer Willem^[1], Persoon-Deen Carla^[2], Boven Leonie A.^[3], van Noort Hans M.^[2], 't Hart Bert A.^[4], Amor Sandra^[4], Bajramovic Jeffrey J.^{*[1]}

^[1]Biomedical Primate Research Centre, Alternatives Unit ~ Rijswijk ~ Netherlands - ^[2]TNO Quality of Life ~ Leiden ~ Netherlands - ^[3]Erasmus University Rotterdam, Department of Immunology ~ Rotterdam ~ Netherlands - ^[4]Biomedical Primate Research Centre, Department of Immunobiology ~ Rijswijk ~ Netherlands

13 - IMMUNOREGULATORY ROLE FOR PERFORIN IN AN ANIMAL MODEL OF CD8+ T CELL-MEDIATED DEMYELINATING DISEASE -

Fournier Sylvie^{*[1]}, Estrada Jose^[1]

^[1]McGill University ~ Montreal ~ Canada

14 - DIABETIC KETOACIDOSIS IN MICE ELICITS A UNIQUE CYTOKINE RESPONSE BETWEEN SERUM AND BRAIN -

Close Taylor E.^{*[3]}, Rose Keeley L.^[3], Summers Kelly L.^[2], Rieder Michael J.^[3], Fraser Douglas D.^[3]

^[2]Lawson Health Research Institute ~ London, ON ~ Canada - ^[3]Children's Health Research Institute ~ London, ON ~ Canada

15 - AUTOANTIGEN PROCESSING IN THE CNS DURING AUTOIMMUNE INFLAMMATION -

Stoeckle Christina^{*[1]}, Hermann Martin^[1], Burster Timo^[2], Beck Alexander^[3], Weissert Robert^[1], Melms Arthur^[1], Tolosa Eva^[1]

^[1]Hertie Institute for Clinical Brain Research ~ Tuebingen ~ Germany - ^[2]University of Ulm ~ Ulm ~ Germany - ^[3]Panatecs ~ Tuebingen ~ Germany



16 - OLFACTORY AXOTOMY INDUCES AN EXPRESSION OF RAE-I AND THE RECRUITMENT OF IMMUNE CELLS INCLUDING NK CELLS IN THE OLFACTORY BULBS -

Oriane Cedile^{*[1]}, Natalia Popa^[1], Lucile Goda^[1], Jose Boucraut^[1]

^[1]CNRS UMR 6231 ~ Marseilles ~ France

17 - POTENTIAL IMMUNOREGULATORY ROLES OF PROGRAMMED CELL DEATH-1 LIGANDS IN HUMAN CENTRAL NERVOUS SYSTEM -

Pittet Camille^{*[3]}, Saikali Philippe^[2], Ifergan Igal^[3], Prat Alexandre^[3], Arbour Nathalie^[3]

^[2]Montreal Neurological Institute, McGill University ~ Montreal ~ Canada - ^[3]Research Center-CHUM, University of Montreal ~ Montreal ~ Canada

18 - TLR2 IS ESSENTIAL FOR THE DEVELOPMENT OF A SUCCESSFUL IMMUNE RESPONSE IN MURINE NEUROCYSTICERCOSIS -

Gundra Uma Mahesh^{*[1]}, Mishra Bibhuti Bhusan^[1], Wong Kondi^[2], Teale Judy M^[1]

^[1]University of Texas at San Antonio ~ San Antonio ~ United States - ^[2]Wilford Room Medical Center ~ San Antonio ~ United States

19 - MOLECULAR CHARACTERIZATION OF CENTRAL NERVOUS SYSTEM-DERIVED STIMULATORY AND INHIBITORY DENDRITIC CELLS -

Cretton Christine^[1], Biollaz Gregoire^[1], Hesske Lysann^[1], Püntener Ursula^[1], Reith Walter^[2], Fontana Adriano^[1], Suter Tobias^{*[1]}

^[1]University Hospital Zurich ~ Zurich ~ Switzerland - ^[2]University of Geneva Medical School ~ Geneva ~ Switzerland

20 - MYD88-DEFICIENCY IS ASSOCIATED WITH REDUCED DISEASE SEVERITY AND DECREASED TH1 INFLAMMATORY RESPONSE IN THE BRAIN DURING MURINE NEUROCYSTICERCOSIS -

Mishra Bibhuti^{*[1]}, Gundra Uma Mahesh^[1], Wong Kondi^[2], Teale Judy^[1]

^[1]University of Texas at San Antonio ~ San Antonio ~ United States - ^[2]Wilford Room Medical Center ~ San Antonio ~ United States

21 - ROLE OF PATHOGENIC T CELLS AND AUTOANTIBODIES IN RELAPSE AND PROGRESSION OF MYELIN OLIGODENDROCYTE GLYCOPROTEIN-INDUCED AUTOIMMUNE ENCEPHALOMYELITIS -

Matsumoto Yoh^{*[1]}, Kohyama Kuniko^[1], Hiraki Keiko^[1]

^[1]Tokyo Metropolitan Institute for Neuroscience ~ Tokyo ~ Japan

22 - TISSUE TRANSGLUTAMINASE IN MULTIPLE SCLEROSIS: A NOVEL THERAPEUTIC TARGET? -

Van Strien Miriam^{*[1]}, Drukarch Benjamin^[1], Binnekade Rob^[1], Bol John^[1], Brevé John^[1], van Dam Anne-Marie^[1]

^[1]VU University Medical Center, dept. Anatomy and Neurosciences ~ Amsterdam ~ Netherlands

23 - CD8+ T-CELLS IN INFLAMMATORY DEMYELINATING DISEASE -

Weiss Hanne^{*[1]}, Millward Jason^[1], Holst Peter^[2], Sørensen Maria Rathmann^[2], Owens Trevor^[1]

^[1]University of Southern Denmark ~ Odense ~ Denmark - ^[2]University of Copenhagen ~ Copenhagen ~ Denmark

24 - EVALUATION OF NEW THALIDOMIDE ANALOGUES WITH THERAPEUTIC POTENTIAL FOR MULTIPLE SCLEROSIS -

Karlik Stephen^{*[1]}, Contino-Pepin Christine^[2], Parat Audry^[2], Pucci Bernard^[2]

^[1]University of Western Ontario ~ London ~ Canada - ^[2]University of Avignon ~ Avignon ~ France

25 - EAE INDUCTION IN THE COMMON MARMOSET WITHOUT ADJUVANT -

Jagessar Anwar^{*[1]}, Kap Yolanda^[1], Heijmans Nicole^[1], van Driel Nikki^[1], Blezer Erwin^[2], Bauer Jan^[3], van den Elsen Peter^[4], 't Hart Bert^[1]

^[1]Biomedical Primate Research Centre ~ Rijswijk ~ Netherlands - ^[2]University Medical Center Utrecht ~ Utrecht ~ Netherlands - ^[3]Medical University of Vienna ~ Vienna ~ Austria - ^[4]VU University medical center ~ Amsterdam ~ Netherlands

26 - ENHANCED EXPERIMENTAL ALLERGIC ENCEPHALOMYELITIS IN IL-15 DEFICIENT MICE -

Karlik Stephen^[1], Rousseau Arielle^[1], Roscoe Wend^[1]

^[1]University of Western Ontario ~ London ~ Canada

27 - DISCREPANT OXYRADICAL PRODUCTION BY PHAGOCYTES FROM MARMOSETS AND RHESUS MONKEYS WITH DIFFERENTIAL ENCEPHALITIS PATHOLOGY -

Kap Yolanda^{*[1]}, van Driel Nikki^[1], Laman Jon^[2], 't Hart Bert^[1]

^[1]Biomedical Primate Research Centre ~ Rijswijk ~ Netherlands - ^[2]ErasmusMC ~ Rotterdam ~ Netherlands

28 - ROLE OF SEMA4D IN THE NEUROINFLAMMATION OF EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS -

Okuno Tatsusada*^[2], Nakatsuji Yujji^[1], Sakoda Saburo^[1], Kumanogoh Atsushi^[2]

^[1]Department of Neurology, Osaka University Graduate School of Medicine ~ Suita ~ Japan - ^[2]Department of Immunopathology, Research Institute for Microbial Diseases, Osaka University ~ Suita ~ Japan

29 - IMAGING ACTIVATION: FRET-BASED CALCIUM BIOSENSORS IN T-LYMPHOCYTES -

Mues Marsilius*^[1], Mank Marco^[1], Griesbeck Oliver^[1], Oboardi Francesca^[1], Flügel Alexander^[1], Kurschus Florian^[1], Wekerle Hartmut^[1]

^[1]Max Planck Institute of Neurobiology ~ Martinsried ~ Germany

30 - THE ROLE OF IL-23 IN CD8-MEDIATED CNS INFLAMMATION -

Eisenring Maya*^[1], Hünig Thomas^[2], Becher Burkhard^[1]

^[1]Dept. Pathology, Inst. of Exp. Immunology, Neuroimmunology, Universitätsspital Zürich ~ Zürich ~ Switzerland - ^[2]Institut für Virologie und Immunbiologie, Universität Würzburg ~ Würzburg ~ Germany

31 - TOLL-LIKE RECEPTOR 2 KNOCKOUT MICE DEVELOP EAE IN RESPONSE TO STAPHYLOCOCCUS AUREUS PEPTIDOGLYCAN AND AUTOANTIGEN STIMULATION -

Chan Wing King^[3], Wolter Karina^[4], Voerman Jane S.A.^[2], Gutcher Ilona^[5], Kool Mirjam^[7], Lambrecht Bart N.^[7], Zähringer Ulrich^[8], Becher Burkhard^[5], Prinz Marco^[4], Laman Jon D.*^[3]

^[3]Department of Immunology, Erasmus MC - University Medical Center ~ Rotterdam ~ Netherlands - ^[4]Institute of Neuropathology, Georg-August-University ~ Gottingen ~ Germany - ^[5]Department of Neurology/Neuroimmunology Unit, Universitätsspital, University of Zurich ~ Zurich ~ Switzerland - ^[7]Department of Pulmonary Medicine, Erasmus MC - University Medical Center ~ Rotterdam ~ Netherlands - ^[8]Division of Immunochemistry, Research Center Borstel ~ Borstel ~ Netherlands

32 - LOSS OF NON-CANONICAL NFKB SIGNALLING IN ANTIGEN-PRESENTING CELLS ABORTS ADAPTIVE IMMUNITY -

Hofmann Janin*^[1], Greter Melanie^[1], Becher Burkhard^[1]

^[1]Neuroimmunology ~ University Zürich ~ Switzerland

33 - THE TREATMENT WITH SELECTIVE PHOSPHODIESTERASE-3 INHIBITOR CILOSTAZOL FOR EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS -

Miyamoto Katsuichi*^[1], Kureshiro Juri^[1], Kusunoki Susumu^[1]

^[1]Kindai University School of Medicine ~ Osaka-Sayama ~ Japan

34 - IL-17-PRODUCING GAMMA DELTA T CELLS INFILTRATE THE CNS DURING THE COURSE OF EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS -

Lalor Stephen*^[2], Murphy Aine^[2], Sutton Caroline^[2], Lynch Marina^[3], Mills Kingston H.G.^[2]

^[2]Immune Regulation Research Group, Trinity College ~ Dublin ~ Ireland - ^[3]Institute of Neuroscience, Trinity College ~ Dublin ~ Ireland

35 - THE HEPATIC RESPONSE IN MULTIPLE SCLEROSIS -

Mardiguan Silvy*^[1], Campbell Sandra^[1], Glabinski Andrzej^[2], Anthony Daniel^[1]

^[1]University of Oxford ~ Oxford ~ United Kingdom - ^[2]Medical University of Lodz ~ Lodz ~ Poland

36- ANTENATAL EXPOSURE OF MARMOSETS TO DEXAMETHASONE AGGRAVATES AUTOIMMUNE ENCEPHALOMYELITIS INDUCED AT ADULT AGE -

† Hart Bert*^[1], Jagessar Anwar^[1], Kap Yolanda^[1], Blezer Erwin^[2], Laman Jon^[3], Bauer Jan^[4], Schlumborn Christina^[5], Fuchs Eberhard^[5], Brok Herbert^[1]

^[1]Biomedical Primate Research Centre ~ Rijswijk ~ Netherlands - ^[2]Image Sciences Institute ~ Utrecht ~ Netherlands -

^[3]Erasmus Medical Center ~ Rotterdam ~ Netherlands - ^[4]Medical University ~ Vienna ~ Austria - ^[5]German Primate Center ~ Göttingen ~ Germany

37 - SUPPRESSION OF EAE BY SIMVASTATIN IN WISTAR RATS IS ASSOCIATED WITH UP-REGULATION OF P53 AND TGF-B AND DOWN-REGULATION OF TNF-A -

MA Cun Gen^[1], DUAN Da Zhi^[1], JI Ning^[1], YU Jie Zhong*^[1], Sun Yong Sheng^[1], Fan Hong Cui^[1], LIANG Li Yun^[1]

^[1]Shanxi Datong University ~ Da Tong ~ China

38 - ANTI-MBP T CELLS CAUSE HIPPOCAMPAL NEURONS INJURY -

Kurkowska - Jastrzebska Iwona^[1], Zaremba Malgorzata, Magdalena*^[2], Zaremba Malgorzata^[3], Czlonkowska Anna^[1], Oderfeld - Nowak Barbara^[3]

^[1]Institute of Psychiatry and Neurology ~ Warsaw ~ Poland - ^[2]Medical University of Warsaw ~ Warsaw ~ Poland - ^[3]Nencki Institute of Neurobiology ~ Warsaw ~ Poland



39 - GENE SILENCING IN ENCEPHALITOGENIC T CELLS BY RNAI ALLOWS NEW INSIGHT INTO GLUCOCORTICOID THERAPY OF EAE -

Tischner Denise^{[1]}, van den Brandt Jens^[1], Herold Marco^[2], Reichardt Holger^[1]*

^[1]Institute for cellular and molecular immunology ~ Goettingen ~ Germany - ^[2]Institute for Virology and Immunobiology ~ Wuerzburg ~ Germany

40 - GENE EXPRESSION IN ACUTE AND CHRONIC MOUSE MODELS OF EAE -

Karlik Stephen^{[1]}, Carter David^[2], Roscoe Wendt^[1]*

^[1]University of Western Ontario ~ London ~ Canada - ^[2]Robarts Research Institute ~ London ~ Canada

41 - DEFINING AUTOACTIVE ENCEPHALITOGENIC T CELLS -

Yang Yuhong^{[1]}, Weiner Jeff^[1], Liu Yue^[1], Racke Michael^[1], Lovett-Racke Amy^[1]*

^[1]Ohio state university medical center ~ Columbus ~ United States

42 - THE ROLE AND FUNCTION OF IL-23R ENGAGEMENT DURING THE DEVELOPMENT OF AUTOIMMUNE INFLAMMATION WITHIN THE CNS -

Gyölvézi Gabor^{[1]}, Haak Stefan^[2], Buch Thorsten^[3], Becher Burkhard^[4]*

^[1]University Hospital of Zurich ~ Zurich ~ Switzerland - ^[2]University Hospital of Zurich ~ Zurich ~ Switzerland - ^[3]University Hospital of Zurich ~ Zurich ~ Switzerland - ^[4]University Hospital of Zurich ~ Zurich ~ Switzerland

43 - SYNTHETIC RETINOID AM80 AMELIORATES EAE BY ATTENUATING TH17-MEDIATED INFLAMMATION -

Klemann Christian^{[1]}, Oki Shinji^[1], Klemann Anna K.^[1], Ozawa Tomoko^[1], Doi Yoshimitsu^[1], Shudo Koichi^[2], Yamamura Takashi^[1]*

^[1]National Institute of Neuroscience, NCNP ~ Tokyo ~ Japan - ^[2]Research Foundation ITSUU Laboratory ~ Tokyo ~ Japan

44 - INTRACEREBRAL DENDRITIC CELLS CRITICALLY MODULATE ENCEPHALITOGENIC VERSUS REGULATORY IMMUNE RESPONSES -

Zozulya Alla L.^[3], Ortler Sonja^{[3]}, Lee JangEun^[2], Weidenfeller Christian^[3], Sandor Matyas^[2], Wiendl Heinz^[3], Fabry Zsuzsanna^[2]*

^[2]Department of Pathology and Laboratory Medicine, University of Wisconsin-Madison ~ Madison ~ United States - ^[3]Department of Neurology, University of Wuerzburg ~ Wuerzburg ~ Germany

45 - IL-17A AND F ARE EXPRESSED BY ENCEPHALITOGENIC TH17 CELLS WHILE THEIR FUNCTION IN CNS INFLAMMATION IS REDUNDANT -

Haak Stefan^{[2]}, Croxford Andy^[3], Kreyborg Katharina^[2], Heppner Frank L.^[4], Pouly Sandrine^[5], Waisman Ari^[3], Becher Burkhard^[2]*

^[2]Neuroimmunology Unit, Department of Pathology, University Hospital Zurich ~ Zürich ~ Switzerland - ^[3]Ist Medical Department, University of Mainz ~ Mainz ~ Germany - ^[4]Department of Neuropathology, Charité - University Berlin ~ Berlin ~ Germany - ^[5]Merck Serono International S.A. ~ Geneva ~ Switzerland

46 - DISSECTION OF THE CELL-SPECIFIC FUNCTIONS OF NF-KB IN EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS -

Emmanouil Mary^{[1]}, Taoufik Era^[1], Tseveleki Vivian^[1], Tselios Theodore^[2], Karin Michael^[3], Lassmann Hans^[4], Probert Lesley^[1]*

^[1]Hellenic Pasteur Institute ~ Athens ~ Greece - ^[2]University of Patras ~ Patras ~ Greece - ^[3]University of California ~ San Diego, CA ~ United States - ^[4]Brain Research Institute ~ Vienna ~ Austria

47 - GM-CSF AND THE GM-CSF RECEPTOR PLAY A CRUCIAL ROLE IN THE REGULATION OF EAE -

Hesske Lysann^{[1]}, Fontana Adriano^[1], Suter Tobias^[1]*

^[1]University Hospital Zurich ~ Zurich ~ Switzerland

48 - INTRAVITAL 2-PHOTON IMAGING OF AUTOACTIVE EFFECTOR T CELLS INVADING THE CNS IN THE INITIAL PHASE OF EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS -

Kawakami Naoto^{[1]}, Odoardi Francesca^[1], Bartholomaeus Ingo^[1], Wekerle Hartmut^[1], Fluegel Alexander^[1]*

^[1]Department of Neuroimmunology, Max Planck Institute for Neurobiology ~ Martinsried ~ Germany

49 - MECHANISMS BY WHICH TOLL LIKE RECEPTORS EXACERBATE OR MODULATE DISEASE SEVERITY IN EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS -

O'Brien Kate^{[1]}, Gran Bruno^[1]*

^[1]University of Nottingham ~ Nottingham ~ United Kingdom

50 - A FLOW CYTOMETRIC APPROACH IN THE CHARACTERIZATION OF ACTIVELY INDUCED EAE IN LEWIS RAT -

Rigolio Roberta^{[1]}, Biffi Alessandro^[1], Oggioni Norberto^[1], Cavaletti Guido^[1]*

^[1]Università degli Studi Milano-Bicocca ~ Monza ~ Italy

51 - MMP-12 IS BENEFICIAL IN A MODEL OF MS THROUGH MODULATION OF CYTOKINES, CHEMOKINES AND OSTEOPOINTIN -

Goncalves DaSilva Angelika*^[1], Yong Voon Wee^[1]

^[1]Univeristy of Calgary ~ Calgary ~ Canada

52 - THERAPEUTIC EFFECT OF THE ALKYL-LYSOPHOSPHOLIPID EDELFOSENE ON IMMUNE CELL ACTIVATION ON EXPERIMENTAL AUTOIMMUNE ENCEPHALITIS -

Abramowski Pierre*^[1], Steinbach Karin^[1], Ayuk Francis A.^[2], Martin Roland^[1], Zander Axel R.^[2]

^[1]Institute for Neuroimmunology and Clinical MS Research ~ Hamburg ~ Germany - ^[2]Department of Oncology/Hematology, University Hospital Eppendorf ~ Hamburg ~ Germany

53 - HEAT SHOCK PROTEINS AS AN IMPORTANT REGULATORS OF AUTOIMMUNE DEMYELINATION -

Mycko Marcin*^[1], Cwiklinska Hanna^[2], Walczak Agata^[4], Szymanska Bozena^[8], Raine Cedric S.^[9], Selmaj Krzysztof^[10]

^[1]Laboratory of Neuroimmunology, Department of Neurology ~ Medical University of Lodz ~ Poland - ^[2]Laboratory of Neuroimmunology, Department of Neurology ~ Medical University of Lodz ~ Poland - ^[4]Laboratory of Neuroimmunology, Department of Neurology ~ Medical University of Lodz ~ Poland - ^[8]Laboratory of Neuroimmunology, Department of Neurology ~ Medical University of Lodz ~ Poland - ^[9]Department of Pathology ~ Albert Einstein College of Medicine, Bronx, NY ~ United States - ^[10]Laboratory of Neuroimmunology, Department of Neurology ~ Medical University of Lodz ~ Poland

54 - DIFFERENTIAL ROLES OF TH1 AND TH17 CD4+ T CELL SUBSETS IN THE PATHOGENESIS OF EAE -

Domingues Helena Sofia*^[1], Krishnamoorthy Gurumoorthy^[1], Lassmann Hans^[2], Wekerle Hartmut^[1]

^[1]Department of Neuroimmunology, Max-Planck-Institute of Neurobiology ~ Martinsried ~ Germany - ^[2]Institute of Neurology, University of Vienna ~ Vienna ~ Austria

55 - DEFINING THE ROLE OF IL-23 IN THE DIFFERENTIATION OF ENCEPHALITOGENIC T CELLS -

Smith Alan J.*^[2], Yang Yuhong^[2], Weiner Jeffrey^[2], Racke Michael K.^[2], Lovett-Racke Amy E.^[2]

^[2]Ohio State University ~ Columbus ~ United States

56 - BOTH BLOOD-DERIVED AND CNS-DERIVED APC CONTRIBUTE TO ANTIGEN PRESENTATION DURING THE EFFECTOR PHASE OF EAE -

Suter Tobias*^[1], LeibundGut-Landmann Salomé^[2], Irla Magali^[2], Adriano Fontana^[1], Reith Walter^[2]

^[1]University Hospital Zurich ~ Zurich ~ Switzerland - ^[2]University of Geneva Medical School ~ Geneva ~ Switzerland

57 - PI3K-GAMMA: DEVELOPING IMMUNE TARGETS FOR THE TREATMENT OF MULTIPLE SCLEROSIS -

Smith Kristen*^[1], Gatson Na Tasha^[1], Williams Jessica^[1], Kithcart Aaron^[1], Mavrikis Gina^[1], Song Fei^[1], Satoskar Abhay^[1], Whitacre Caroline C.^[1]

^[1]The Ohio State University ~ Columbus ~ United States

58 - THE DOMINANCY OF ENCEPHALITOGENIC PEPTIDE CORRELATES TO ITS ABILITY TO INDUCE POTENT REGULATORY T CELLS -

Lin Youwei*^[1], Miyake Sachiko^[1], Yamamura Takashi^[1]

^[1]National Institute of Neuroscience, NCNP ~ Tokyo ~ Japan

59 - PREGNANCY MODULATES ONGOING EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS (EAE) INDUCED BY TH1 AND TH17 CELLS -

Song Fei*^[1], Gienapp Ingrid^[1], Shawler Todd^[1], Williams Jessica^[1], Smith Kristen^[1], Kithcart Aaron^[1], Whitacre Caroline C.^[1]

^[1]The Ohio State University ~ Columbus ~ United States

60 - KINETIC AND CYTOKINE PROFILE OF CD4+FOXP3+ REGULATORY T CELLS IN PERIPHERAL LYMPHOID ORGANS AND CNS DURING THE COURSE OF RELAPSING EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS -

Esposito Marianna*^[1], Borsellino Giovanna^[2], Bergami Alessandra^[1], Ruffini Francesca^[1], Martino Gianvito*^[1], Battistini Luca^[2], Furlan Roberto^[1]

^[1]San Raffaele Scientific Institute ~ Milano ~ Italy - ^[2]Centro Europeo per la Ricerca sul Cervello (CERC)/Fondazione Santa Lucia ~ Roma ~ Italy

61 - LIVER X RECEPTOR AGONIST T0901317 AMELIORATES EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS THROUGH SUPPRESSING IL-17 PRODUCTION -

Xu Jihong*^[1], Drew Paul^[1]

^[1]University of Arkansas for Medical Sciences ~ Little rock ~ United States

62 - GENERATION OF FUNCTIONAL MOUSE PLASMACYTOID DENDRITIC CELLS DEPENDS ON CD28 AND NOT ON IL-17 -

Gaupp Stefanie^{*[1]}, Seubert Silvia^[1], Lühder Fred^[6], Selmaj Krzysztof^[7], Gold Ralf^[1]

^[1]St. Josef-Hospital Ruhr-University Bochum ~ Bochum ~ Germany - ^[6]Institute for Multiple Sclerosis Research, University of Goettingen and Gemeinnuetzige Hertie-Stiftung ~ Goettingen ~ Germany - ^[7]Medical University of Lodz ~ Lodz ~ Poland

63 - ANTI-INFLAMMATORY ACTIVITY OF AN OSTEOPONTIN-LIKE PROTEIN IN EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS -

Muzio Valeria^{*[1]}, Adage Tiziana^[1], Dati Gabriele^[1], Cirillo Rocco^[1], Gréco Béatrice^[1], Zarin Paola Francesca^[1]

^[1]Merck Serono International S.A. ~ Turin ~ Italy

64 - THE ROLE OF TGF-BETA SIGNALING CELLS IN THE PATHOGENESIS OF EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS -

Ding Zhaoqing^{*[2]}, Luo Jian^[2], Wyss-Coray Tony^[2]

- ^[2]Department of Neurology and Neurological Sciences, Stanford University School of Medicine ~ Stanford, CA 94305 ~ United States

65 - DIFFERENTIATION OF PRIMARY ADULT MICROGLIA ON GM-CSF/IL-4 LEADS TO A BLOCK IN TOLL-LIKE RECEPTOR-MEDIATED RESPONSES -

Zuiderwijk-Sick Ella A.^[1], van der Putten Céline^[1], Pasini Erica M.^[2], van Straalen Linda^[1], Kondova Ivanela^[3], Bajramovic Jeffrey J.^{*[1]}

- ^[1]Biomedical Primate Research Centre, Alternatives Unit ~ Rijswijk ~ Netherlands - ^[2]Biomedical Primate Research Centre, Department of Parasitology ~ Rijswijk ~ Netherlands - ^[3]Biomedical Primate Research Centre, Animal Science Department ~ Rijswijk ~ Netherlands

66 - MOLECULAR MIMICRY BETWEEN NEURONS AND AN INTRACEREBRAL PATHOGEN INDUCES A CD8 T CELL-MEDIATED AUTOIMMUNE DISEASE -

Sanchez-Ruiz Monica^[2], Wilden Laura, Müller Werner^[3], Stenzel Werner^[4], Brunn Anna^[2], Miletic Hrvoje^[2], Schlüter Dirk^[5], Deckert Martina^{*[2]}

- ^[2]Abteilung für Neuropathologie, Universitätsklinikum Köln ~ Köln ~ Germany - ^[3]Helmholtz Zentrum für Infektionsforschung ~ Braunschweig ~ Germany - ^[4]Abteilung für Neuropathologie, Universitätsklinikum Köln ~ Köln ~ Germany - ^[5]Institut für Medizinische Mikrobiologie, OvG Universität Magdeburg ~ Magdeburg ~ Germany

67 - PI3K/PKB AND MEK/ERK SIGNALING PATHWAYS MEDIATE NCS-1 EXPRESSION IN LYMPHOCYTES -

Torres Karen^{*[1]}, Souza Bruno^[1], Sampaio Andre^[1], Barros Alexandre^[1], Gollob Kenneth^[1], Dutra Walderez^[1], Romano-Silva Marco Aurélio^[1]

- ^[1]UFMG ~ Belo Horizonte ~ Brazil

68 - CHEMOKINE-DRIVEN MOLECULAR CASCADE ORCHESTRATES INJURY AND REPAIR IN THE MPTP MOUSE MODEL OF BASAL GANGLIA INJURY: THE CHIEF INSTRUCTIVE ROLE OF WNT AND CONCERTED GLIA-NEURON CROSS-TALK -

L'Episcopo Francesca^[1], Morale Maria Concetta^[1], Giuliana Salani^[2], Luciana Andreoni^[3], Diego Franciotta^[3], Stefano Pluchino^[2], Gian Vito Martino^[2], Bianca Marchetti^{*[3]}

- ^[1]Neuropharmacology, OASI Institute ~ Troina (EN) ~ Italy - ^[2]Neuroimmunology Unit, DIBIT and Institute of Experimental Neurology (InSpe), San Raffaele Scientific Institute ~ Milano ~ Italy - ^[3]Laboratory of Neuroimmunology, Neurological Institute "C. Mondino", University of Pavia ~ Pavia ~ Italy

69 - INHIBITION OF SPINAL MICROGLIOSIS ATTENUATES NERVE INJURY INDUCED-HYPERSENSITIVITY -

Stefania Echeverry^{*}, Xiang Qun Shi, Ji Zhang

The Alan Edwards Centre for Research on Pain, McGill University, Montreal, QC, Canada

70 - THE ROLE OF THE CHEMOKINE KC IN THE PATHOGENESIS OF GLOBOID CELL LEUKODYSTROPHY -

Reddy Adarsh^{*}, Klein Robyn^{*}, Mark Sands^{*}

Washington University School of Medicine, St. Louis, United States

POSTER SESSION: STEMS CELLS, IMMUNE PATHOGENESIS AND NEUROPROTECTION**1 - INVOLVEMENT OF TH1 AND TH17 PATHWAYS IN CHRONIC INFLAMMATORY DEMYELINATING POLYNEUROPATHY -**

Madia Francesca^{*[1]}, Frisullo Giovanni^[1], Nociti Viviana^[1], Luigetti Marco^[1], Conti Amelia^[1], Patanella Agata Katia^[1], Iorio Raffaele^[1], Tonalì Pietro^[1], Sabatelli Mario^[1], Batocchi Anna Paola^[1]

^[1]Policlinico A Gemelli ~ Roma ~ Italy

2 - DIFFERENTIAL EARLY GENE EXPRESSION IN CULTURES OF CENTRAL NERVOUS SYSTEM NEURONS INDUCED BY TH1 AND TH2 LYMPHOCYTE AND MONOCYTE/MACROPHAGE CYTOKINES -

Lisak Robert^{*[2]}, Benjamins JA^[2], Nedelkoska L^[2], Bealmer B^[2], Xu W^[2]

^[2]Wayne State University ~ Detroit, Michigan ~ United States

3 - EXPANDED CD8+ T CELL CLONES DOMINATE BRAIN INFILTRATES IN RASMUSSEN'S ENCEPHALITIS AND SHOW LONG-TERM PERSISTENCE IN THE PERIPHERY -

Schwab Nicholas^{*[1]}, Bien Christian^[2], Waschbisch Anne^[1], Becker Albert^[3], Dornmair Klaus^[4], Wiendl Heinz^[1]

^[1]Clinical Research Group for Multiple Sclerosis and Neuroimmunology ~ Würzburg ~ Germany - ^[2]Department of Epileptology ~ Bonn ~ Germany - ^[3]Department of Neuropathology ~ Bonn ~ Germany - ^[4]Institute for Clinical Neuroimmunology ~ München ~ Germany

4 - AXONAL LOSS AND GREY MATTER PATHOLOGY AS A DIRECT RESULT OF AUTOIMMUNITY TO NEUROFILAMENTS -

Huizinga Ruth^[1], Gerritsen Wouter^[2], Heijmans Nicole^[3], Amor Sandra^{*[2]}

^[1]Department of Immunology, Erasmus MC, University Medical Center, ~ Rotterdam ~ Netherlands - ^[2]Department of Pathology, MS Center, VU University Medical Center ~ Amsterdam, ~ Netherlands - ^[3]Department of Immunobiology, Biomedical Primate Research Centre ~ Rijswijk, ~ Netherlands

5 - REQUIREMENT OF MYELOID CELLS FOR AXON REGENERATION -

Benoit Barrette^[1], Nicolas Vallières^[1], Nadia Fortin^[1], Jean-Pierre Julien^[1], Steve Lacroix^{*[1]}

^[1]Laval University and CHUL Research Center ~ Quebec City ~ Canada

6 - TYPE 1-TYPE 2 CYTOKINES PATTERNS IN CHRONIC DYSIMMUNE POLYNEUROPATHIES -

Gironi Maira^{*[1]}, Saressella Marina^[1], Marventano Ivana^[1], Guerini Franca Rosa^[1], Antonini g^[2], Ceresa Lara^[1], Marino S^[2], Beghi Ettore^[3], Clerici Mario^[4], Nemni Raffaello^[4]

^[1]Don C. Gnocchi ONLUS Foundation IRCCS ~ Milano ~ Italy - ^[2]University of Rome ~ Roma ~ Italy - ^[3]Mario Negri Institute ~ Milano ~ Italy - ^[4]Don C. Gnocchi ONLUS Foundation IRCCS University of Milan ~ Milano ~ Italy

7 - GRANZYME B-INHIBITS HUMAN NEUROGENESIS VIA GI-COUPLED RECEPTOR AND SUBSEQUENT KVI.3 CHANNEL ACTIVATION -

Wang Tongguang^{*[1]}, Hu Lina^[1], Johnson Tory^[1], Haughey Norman^[1], Calabresi Peter^[1], Nath Avindra^[1]

^[1]Johns Hopkins University ~ Baltimore ~ United States

8 - IDENTIFICATION OF HEME OXYGENASE-I AS A NOVEL TARGET OF NEUROPROTECTION BY MINOCYCLINE IN HUMAN NEURONS -

Liu Shuhong^{*[1]}, Xue Mengzhou^[1], Yong V. Wee^[1]

^[1]University of Calgary ~ Calgary ~ Canada

9 - INHIBITORY EFFECTS OF 17B-ESTRADIOL ON PRODUCTION OF BOTH MOLECULAR AND CELLULAR FACTORS IN NEUROINFLAMMATORY REACTION IN MALE MICE FOLLOWING MPTP INTOXICATION -

Ciesielska Agnieszka^{*[2]}, Joniec Ilona^[2], Cudna Agnieszka^[2], Kurkowska-Jastrzebska Iwona^[1], Zaremba Malgorzata^[2], Czlonkowska Anna^[1], Czlonkowski Andrzej^[2]

^[1]Institute of Psychiatry and Neurology ~ Warsaw ~ Poland - ^[2]Medical University of Warsaw ~ Warsaw ~ Poland

10 - CHARACTERIZATION OF LYSOLECITHIN-INDUCED DEMYELINATION, WITH A FOCUS ON THE EARLY INFLAMMATORY RESPONSES AND THEIR POSSIBLE ROLES -

Döring Axinia^{*[1]}, Yong V. Wee^[1]

^[1]Hotchkiss Brain Institute, University of Calgary ~ Calgary ~ Canada

11 - TREATMENT OF AN ANIMAL MODEL FOR MULTIPLE SCLEROSIS WITH RESVERATROL, A NATURAL COMPOUND IN RED WINE -

Tsunoda Ikuo^{*[1]}, Rose John W.^[2], Rojas Monica^[1], Hasanovic Faris^[1], Carlson Noel G.^[2]

^[1]University of Utah ~ Salt Lake City ~ United States - ^[2]Veterans Affairs Salt Lake City Health Care System ~ Salt Lake City ~ United States

12 - 17B-ESTRADIOL ADMINISTRATION PROTECTS AGAINST DOPAMINE DEPLETION, DOWN-REGULATES ASTROGLIAL ACTIVATION AND MODULATES CYTOKINE PRODUCTION IN THE NIGRO-STRIATAL SYSTEM IN FEMALE MICE FOLLOWING TOXIC DEGENERATION CAUSED BY MPTP -

*Joniec Ilona**^[1], *Ciesielska Agnieszka*^[1], *Cudna Agnieszka*^[1], *Zaremba Malgorzata*^[1], *Kurkowska-Jastrzebska Iwona*^[2], *Czlonkowska Anna*^[2], *Czlonkowski Andrzej*^[1]

^[1]Medical University of Warsaw ~ Warsaw ~ Poland - ^[2]Institute of Psychiatry and Neurology ~ Warsaw ~ Poland

13- ESSENTIAL ROLE FOR MYELOID DERIVED CELLS IN THE RECOVERY FROM SPINAL CORD INJURY -

*London Anat**^[1], *Shechter Ravid*^[1], *Varol Chen*^[1], *Cusimano Melania*^[2], *Rolls Asya*^[1], *Pluchino Stefano*^[2], *Martino Gianvito*^[2], *Jung Steffen*^[1], *Schwartz Michal*^[1]

^[1]Weizmann Institute of Science ~ Rehovot ~ Israel - ^[2]San Raffaele Scientific Institute ~ Milan ~ Italy

14 - ORAL FINGOLIMOD (FTY720) SUPPRESSES ESTABLISHED EAE AND ALLOWS REMYELINATION -

*Schubart Anna**^[1], *Seabrook Tim*^[1], *Rausch Martin*^[1], *Mir Anis*^[1]

^[1]Novartis Institutes of BioMedical Research ~ Basel ~ Switzerland

15 - NEUROPROTECTIVE AND IMMUNOMODULATORY EFFECTS OF LEUKEMIA INHIBITORY FACTOR DURING NEUROINFLAMMATORY RESPONSES IN MULTIPLE SCLEROSIS -

*Slaets Helena Stefanie Elisabeth**^[1], *Hendriks Jerome*^[1], *Carmans Sofie*^[1], *Stinissen Pieter*^[1], *Hellings Niels*^[1]

^[1]Hasselt University ~ Diepenbeek ~ Belgium

16 - MICROGLIA/MACROPHAGE-INDUCED NEUROTOXICITY IS MEDIATED BY GLUTAMATE AND ATTENUATED BY GLUTAMINASE INHIBITORS AND GAP JUNCTION INHIBITORS -

*Harada Yohei**^[1], *Yawata Izumi*^[1], *Takeuchi Hideyuki*^[1], *Sonobe Yoshifumi*^[1], *Jin Shijie*^[1], *Doi Yukiko*^[1], *Liang Jianfeng*^[1], *Kawanokuchi Jun*^[1], *Mizuno Tetsuya*^[1], *Suzumura Akio*^[1]

^[1]Nagoya University ~ Nagoya ~ Japan

17 - PHENOTYPIC AND FUNCTIONAL FEATURES OF CNS CD8+ T CELLS MEDIATING A DEMYELINATING DISEASE -

*N'Diaye Marie**^[1], *Fournier Sylvie*^[1]

^[1]McGill University ~ Montreal ~ Canada

18 - IMMUNE REGULATORY NEURAL STEM/PRECURSOR CELLS RESTRAIN DENDRITIC CELL FUNCTION IN SECONDARY LYMPHOID ORGANS VIA A BMP-4-DEPENDENT MECHANISM -

*Zanotti Lucia**^[1], *Rovere-Querini Patrizia*^[1], *Capobianco Annalisa*^[1], *Alfaro-Cervello Clara*^[2], *Borsellino Giovanna*^[3], *Battistini Luca*^[3], *Garcia-Verdugo Jose Manuel*^[2], *Manfredi Angelo*^[1], *Martino Gianvito*^[1], *Pluchino Stefano*^[1]

^[1]San Raffaele Scientific Institute ~ Milano ~ Italy - ^[2]University of Valencia ~ Valencia ~ Spain - ^[3]IRCCS Santa Lucia ~ Rome ~ Italy

19 - NEURAL STEM/PRECURSOR CELL (NPC) TRANSPLANTATION IN MICE WITH EXPERIMENTAL CEREBRAL ISCHEMIC STROKE: A STUDY ON NEURORESTORATION AND NEUROPROTECTION -

*Bacigaluppi Marco**^[1], *Pluchino Stefano*^[1], *Peruzzotti Jametti Luca*^[1], *Kilic Ertugrul*^[2], *Comi Giancarlo*^[1], *Hermann Dirk*^[2], *Martino Gianvito*^[1]

^[1]San Raffaele Scientific Institute ~ Milano ~ Italy - ^[2]University Hospital Zurich (UHZ) ~ Zurich ~ Switzerland

20- IMMUNOREGULATORY PROPERTIES OF NEURAL PRECURSOR CELLS : IN VITRO CHARACTERIZATION -

*Bonnamain Virginie**^[1], *Michel Delphine*^[1], *Nerrière Daguin Véronique*^[1], *Thinard Reynald*^[1], *Dugast Anne-Sophie*^[1], *Brachet Philippe*^[1], *Anegon Ignacio*^[1], *Vanhove Bernard*^[1], *Neveu Isabelle*^[1], *Naveilhan Philippe*^[1]

^[1]INSERM U643 ~ Nantes ~ France

21 - MSCS-DCS INTERACTIONS: AN INTIMATE CELL-CELL CONTACT -

Aldinucci Alessandra^[1], *Biagioli Tiziana*^[1], *Pieri Laura*^[2], *Romagnoli Paolo*^[2], *Mazzanti Benedetta*^[3], *Saccardi Riccardo*^[3], *Massacesi Luca**^[1], *Ballerini Clara*^[1]

^[1]Department of Neurological Sciences ~ Florence ~ Italy - ^[2]Department of Anatomy, Histology and Forensic Medicine ~ Florence ~ Italy - ^[3]Department of Hematology ~ Florence ~ Italy

22 - IDENTIFICATION OF MOLECULAR PATHWAYS INVOLVED IN THERAPEUTIC EFFECT OF MESENCHYMAL STEM CELLS -

*Casazza Simona**^[1], *Uccelli Antonio*^[3], *Mancardi Gianluigi*^[2], *Oksenberg Jorge*^[1], *Baranzini Sergio*^[1]

^[1]Department of Neurology, School of Medicine, University of California, San Francisco ~ San Francisco ~ United States -

^[2]Neuroimmunology Unit, Department of Neurosciences, Ophthalmology and Genetics, University of Genoa ~ Genoa ~ Italy

- ^[3]Neuroimmunology Unit, Department of Neurosciences, Ophthalmology and Genetics, University of Genoa ~ Genoa ~ Italy

23 - MURINE MESENCHYMAL STEM CELLS INHIBIT DIFFERENTIATION AND FUNCTION OF BONE MARROW DENDRITIC CELLS BY IMPAIRING OF ANTIGEN PROCESSING MACHINERY COMPONENTS AND TOLL LIKE RECEPTOR SIGNALING -*Chiesa Sabrina*^[1], Traggiai Elisabetta^[2], Morando Sara^[3], Uccelli Antonio^[4]*^[1]Department of Neuroscience Ophthalmology and Genetic ~ Genoa ~ Italy - ^[2]Institute G.Gaslini ~ Genoa ~ Italy -^[3]Department of Neuroscience Ophthalmology and Genetic ~ Genoa ~ Italy - ^[4]Department of Neuroscience Ophthalmology and Genetic ~ Genoa ~ Italy**24 - MESENCHYMAL STEM CELLS REDUCE METALLOTHIONEIN UP-REGULATION AND OXIDATIVE STRESS IN A RODENT MODEL OF MULTIPLE SCLEROSIS -***Lanza Cristina*^[1], Voci Adriana^[1], Canesi Laura^[1], Morando Sara^[2], Principato Maria Cristina^[2], Uccelli Antonio^[2], Vergani Laura^[1]*^[1]Department of Biology - University of Genoa ~ Genoa ~ Italy - ^[2]Department of Neurosciences, Ophthalmology and Genetics, University of Genoa ~ Genoa ~ Italy**25 - RECIPROCAL INTERACTIONS BETWEEN HUMAN MESENCHYMAL STEM CELLS AND UNCONVENTIONAL T CELL POPULATIONS -***Benvenuto Federica*^[1], Prigione Ignazia^[2], Bocca Paola^[2], Gualandi Francesca^[3], Mancardi Gianluigi^[1], Pistoia Vito^[2], Uccelli Antonio^[1]*^[1]University of Genoa ~ Genoa ~ Italy - ^[2]G Gaslini Institute ~ Genoa ~ Italy - ^[3]San Martino Hospital ~ Genoa ~ Italy**POSTER SESSION: LATE BREAKING FINDINGS****1 - SULFUROUS WATERS IMPROVE NEUROMUSCULAR COORDINATION AND INCREASE TOTAL GLUTATHIONE LEVELS AND NATURAL KILLER ACTIVITY IN MATURE MICE -***Celaya A.^[1], De las Casas M.^[1], Cruces J.^[1], Hernandez O.^[1], De Castro N.^[1], Mate I.^[1], Arranza L.*^[1], Baeza I.^[1], De la Fuente M.^[1]*- ^[1]Department of Physiology, Faculty of Biology, Complutense University of Madrid, Spain.**2 - EFFECT OF ENRICHED ENVIRONMENTS ON PLASMA CORTICOSTERONE AND LYMPHOCYTE GLUTATHIONE CONTENT IN MALE AND FEMALE TRIPLE-TRANSGENIC MICE FOR ALZHEIMER'S DISEASE -***Arranz L.*^[1], Gimenez-Llort L.^[2], De Castro N.^[1], Baeza I.^[1], De la Fuente M.^[1]*- ^[1]Dept.of Physiology (Animal Physiology II),UCM,28040 Madrid Spain - ^[2]Institute of Neuroscience,UAB,08193 Bellaterra,Spain**3 - COMPLEMENT INHIBITION ABROGATES NERVE SODIUM CHANNEL DISRUPTION IN A RABBIT MODEL OF GUILLAIN-BARRE SYNDROME -***Yuki Nobuhiro*^[1]*- ^[1] GBS Laboratory ~ Tokyo ~ Japan**4 - THE ROLE OF MICRORNAS DURING MICROGLIA ACTIVATION -***Silvestroni Aurelio^[1], M Iler Thomas*^[1]*- ^[1]University of Washington ~ Seattle ~ United States**5 - MODULATION OF HUMAN CD4+CD25+ REGULATORY T CELLS BY TLR2 IS DOSE DEPENDENT -***Nyirenda Mukanthu*^[1], Constantinescu Cris^[1], Gran Bruno^[1]*- ^[1]University of Nottingham ~ Nottingham ~ United Kingdom**6 - INFLUENCE OF CYP3A5 POLYMORPHISM ON THE TACROLIMUS AND CYCLOSPORINE TROUGH CONCENTRATIONS IN MYASTHENIA GRAVIS PATIENTS -***Kawaguchi Naoki*^[1], Nakatani Kaname^[2], Nemoto Yuko^[1], Takahashi Hirokatsu^[1]*- ^[1]Chiba University, Graduate School of Medicine ~ Chiba ~ Japan - ^[2]Mie University School of Medicine ~ Mie ~ Japan**7 - NO EVIDENCE OF INCREASED GENETIC SUSCEPTIBILITY TO AUTOIMMUNE DISEASES IN PORTUGUESE MULTIPLE SCLEROSIS PATIENTS -***Silva Ana^[2], Bettencourt Andreia^[1], Santos Ernestina^[2], Coutinho Ester^[2], Pereira Clara^[1], Carvalho Cludia^[3], Mendonca Denisa^[1], Vasconcelos Carlos^[2], Pinho e Costa Paulo^[3], Monteiro Lu s^[2], Martins Silva Berta^[1]*- ^[1]Istituto de Ciências Biomédicas Abel Salazar (ICBAS) ~ Porto ~ Portugal - ^[2]Hospital Geral de Santo António (HGSA) ~ Porto ~ Portugal - ^[3]Instituto Nacional de Saúde Dr. Ricardo Jorge (INSA) ~ Porto ~ Portugal

8 - BENIGN COURSE IN MULTIPLE SCLEROSIS: ASSOCIATION WITH AUTOIMMUNITY AND THE PROTEIN TYROSINE PHOSPHATASE (PTPN22) I858C>T GENE POLYMORPHISM -

Bettencourt Andreia^{*[1]}, Silva Ana^[2], Pereira Clara^[1], Coutinho Ester^[2], Santos Ernestina^[2], Carvalho Cláudia^[2], Mendonça Denisa^[1], Pinho e Costa Paulo^[3], Monteiro Luísa^[2], Silva Berta^[1]

- ^[1]Instituto de Ciências Biomédicas Abel Salazar (ICBAS) ~ Porto ~ Portugal - ^[2]Hospital Geral de Santo António (HGSA) ~ Porto ~ Portugal - ^[3]Instituto Nacional de Saúde Dr. Ricardo Jorge (INSA) ~ Porto ~ Portugal

9 - CD8+ T-CELLS ARE REQUIRED FOR THE THERAPEUTIC EFFECTS OF GLATIRAMER ACETATE (COPAXONE) ON AUTOIMMUNE DEMYELINATION -

Mendoza Jason^{*[1]}, York Nathan^[1], Benagh Andrew^[1], Firan Mihail^[1], Karandikar Nitin^[1]

- ^[1]UT-Southwestern Medical Center ~ Dallas ~ United States

10 - IMMUNOHISTOCHEMICAL CHARACTERIZATION OF THE TRANSLOCATOR PROTEIN 18 KDA (PERIPHERAL BENZODIAZEPINE RECEPTOR) IN NORMAL AND DISEASED HUMAN BRAIN -

Cosenza-Nashat Melissa^{*[4]}, Zhao Meng-Liang^[1], Suh Heyon-Sook^[1], Morgan Janet^[5], Natividad Ryan^[4], Morgello Susan^[6], Lee Sunhee C.^[1]

- ^[1]Department of Pathology, Albert Einstein College of Medicine ~ Bronx, NY 10461 ~ United States - ^[4]Department of Science, Borough of Manhattan Community College of the City University of New York ~ New York, NY 10007 ~ United States - ^[5]Department of Dermatology, Roswell Park Cancer Institute ~ Buffalo, NY 14263 ~ United States - ^[6]Departments of Pathology and Neuroscience, Mount Sinai Medical Center ~ New York, NY 10029 ~ United States

11 - SIX YEARS OBSERVATION OF TONGUE MUSCLE ATROPHY IN A MUSK-MG PATIENT -

Nemoto Yuko^[1], Kawaguchi Naoki^[1], Takahashi Hirokatsu^[1], Ito Syoichi^[1], Kuwabara Satoshi^[1]

- ^[1] Department of Neurology, Graduate School of Medicine, Chiba University ~ Chiba ~ Japan

12 - MENINGEAL MYELOID CELLS AS MIDDLEMEN BETWEEN T CELL DEFICIENCY AND DEPRESSIVE BEHAVIOR -

Derecki Noel^{*[1]}, Chunhui Yang^[2], Kipnis Jonathan^[2]

^[1]University of Virginia Neuroscience Graduate Program ~ Charlottesville, VA ~ United States - ^[2]University of Virginia Department of Neuroscience ~ Charlottesville, VA ~ United States

13 - THE PATHWAY OF CX3CR1 AND FRACTALKINE INTERACTION IS INVOLVED IN THE LEUKOCYTES INFILTRATION ON EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS IN MICE -

Muramoto Kenzo^{*[2]}, Kuboi Yoshikazu^[2], Ogasawara Hideaki^[1], Rikitsu Etsuko^[1], Mizuno Keiko^[1], Nishimura Miyuki^[1], Imai Toshio^[1]

- ^[1]Kan research institute ~ Kobe ~ Japan - ^[2]Eisai Co., LTD. ~ Tsukuba-shi ~ Japan

14 - MODULATION OF THE HIV-1 INFECTED MICROGLIAL PROTEOME BY ASTROCYTES -

Kraft-Terry Stephanie^{*[5]}, Wang Tong^[2], Schlautman Joshua^[2], Ciborowski Pawel^[2], Gendelman Howard^[2]

^[2]Department of Pharmacology and Experimental Neuroscience, University of Nebraska Medical Center ~ Omaha, Nebraska ~ United States - ^[5]Department of Pharmacology and Experimental Neuroscience, University of Nebraska Medical Center ~ Omaha, Nebraska ~ United States

15 - ANTI-LEUKOCYTE ADHESION THERAPY FOR THE TREATMENT OF SEIZURES AND EPILEPSY -

Martinello Marianna^{*[1]}, Fabene Paolo^[2], Navarro-Mora Graciela^[2], Rossi Barbara^[1], Merigo Flavia^[2], Bach Simone Dorothea^[1], Angiari Stefano^[1], Marzola Pasquina^[2], Sbarbati Andrea^[2], Butcher Eugene^[3], Constantin Gabriela^[1]

- ^[1]University of Verona, Department of Pathology ~ Verona ~ Italy - ^[2]University of Verona, Department of Morphological sciences ~ Verona ~ Italy - ^[3]Stanford University School of Medicine, Department of Pathology ~ Stanford, CA ~ United States

16 - ROBUST CELL SURFACE PROTEIN TRANSFORMATION FOLLOWS RESTRICTED MONOCYTE HIV-1 INFECTION AND CELL DIFFERENTIATION -

Kadiu Irena^{*[1]}, Wang Tong^[1], Dubrovsky Larisa^[2], Ciborowski Pawel^[1], Schlautman Joshua^[1], Bukrinsky Michael^[2], Gendelman Howard^[1]

^[1]University of Nebraska Medical Center ~ Omaha, NE ~ United States - ^[2]The George Washington University ~ Washington DC ~ United States

17 - IMMUNE REGULATORY ROLE FOR CNS-SPECIFIC, AUTOREACTIVE CD8+ T-CELLS IN MULTIPLE SCLEROSIS -

Baughman Ethan^{*[1]}, Pillai Vinodh^[1], Frohman Elliot C.^[1], Karandikar Nitin J.^[1]

- ^[1]UT Southwestern Medical Center ~ Dallas ~ United States

18 - MICRORNAs REGULATE BRAIN TO BODY ANTI-INFLAMMATORY SIGNALING -

Shaked Iftach^{*[1]}, Meerson Ari^[2], Avni Ran^[3], Gilboa-geffen Adi^[4], Soreq Hermona^[5]

- ^[1]Iftach Shaked ~ The Hebrew University of Jerusalem ~ Israel - ^[2]Ari Meerson ~ The Hebrew University of Jerusalem ~ Israel - ^[3]Ran Avni ~ The Hebrew University of Jerusalem ~ Israel - ^[4]Adi Gilboa-Geffen ~ The Hebrew University of Jerusalem ~ Israel - ^[5]Hermona Soreq ~ The Hebrew University of Jerusalem ~ Israel

19 - TLR3 AND TLR4 ARE INNATE ANTIVIRAL IMMUNE RECEPTORS IN HUMAN MICROGLIA -Suh Hyeon-Sook^{*[1]}, Zhao Meng-Liang^[1], Belbin Thomas J.^[1], Brosnan Celia F.^[1], Lee Sunhee C.^[1]- ^[1]Albert Einstein College of Medicine ~ NY ~ United States**20 - MONOCLONAL ANTIBODY PRODUCTION BY IMMORTALIZATION OF B CELLS FROM THE THYMUS OF MYASTHENIA GRAVIS PATIENTS -**Vrolix Kathleen^[1], Fraussen Judith^[2], Meulemans Els^[3], Becker Phillip^[4], Phernambucq Marko^[1], Somers Veerle^[2], Losen Mario^[1], De Baets Marc^[4], Mart nez Mart nez Pilar^{*[1]}- ^[1]Department of Neuroscience ~ Maastricht ~ Netherlands - ^[2]Neuroimmunology group ~ Hasselt ~ Belgium - ^[3]Department of Pathology ~ Maastricht ~ Netherlands - ^[4]Department of Neuroscience ~ Maastricht ~ Netherlands**21 - IGG4 IMMUNOTHERAPY OF MYASTHENIA GRAVIS -**Losen Mario^{*[1]}, Martinez-Martinez Pilar^[1], Brok Herbert^[2], t Hart Bert^[2], Schuurman Janine^[3], Parren Paul^[3], De Baets Marc^[1]- ^[1]Department of Neuroscience ~ Maastricht ~ Netherlands - ^[2]Department of Immunobiology ~ Biomedical Primate Research Centre, Rijswijk ~ Netherlands - ^[3]Genmab ~ Utrecht ~ Netherlands**22 - HIV-1-INDUCED BLOOD-BRAIN BARRIER DYSFUNCTION: CROSSTALK BETWEEN STAT1, MEK, AND PI3K PATHWAYS. -**Bo Yang, Sangya Singh, and Georgette Kanmogne^{*[1]}- ^[1]Department of Pharmacology and Experimental Neurosciences, University of Nebraska Medical Center, Omaha, Nebraska.**AFTERNOON****ROOM A**13.30-15.30 **CONCURRENT SYMPOSIUM: T-REGULATORY CELLS IN NEUROIMMUNOLOGY**
Chairs: **S. Ziegler, R. Caspi**13.30-14.00 Functionally distinct populations of human natural CD25 high Tregs in healthy donors and patients with multiple sclerosis *Clare Becher Allen*14.00-14.30 FOXP3 and regulatory T cell function *Steven Ziegler*14.30-15.00 CD4 and CD8 regulatory T cells in multiple sclerosis *Nitin Karandikar*15.00-15.30 T-regulatory cells and autoimmunity in the immune privileged eye *Rachel Caspi***ROOM B**13.30-15.30 **CONCURRENT SYMPOSIUM: NEUROPROTECTIVE STRATEGIES IN NEUROIMMUNOLOGIC DISEASE**Chairs: **S. Khoury, S. Appel**13.30-14.00 Interactions between the immune system and neural stem cells *Samia Khoury*14.00-14.30 T cell astrocyte crosstalk in health and disease *Jonathan Kipnis*14.30-15.00 CD4+ T-cells modify disease progression in models of familial ALS *Stanley H.Appel*15.00-15.30 Regenerating the brain: the role of neural stem cells *Gianvito Martino***ROOM C**13.30-15.30 **CONCURRENT SYMPOSIUM: PARANEOPLASTIC AND POST-INFECTIOUS SYNDROMES**Chairs: **S.Vernino, H. Willison**13.30-14.00 Autoimmune autonomic ganglionopathy *Steven Vernino*14.00-14.30 Anti-glycolipid antibodies in Guillain Barré syndrome *Hugh Willison*14.30-15.00 Antibodies to ganglioside complexes in autoimmune neuropathies *Susumu Kusunoki*15.00-15.30 Cellular immune responses in autoimmune neuropathies of culprits and victims *Bernd Kieseier*



ROOM E

13.30-15.30

CONCURRENT SYMPOSIUM: IMMUNE REGULATION AND TOLERANCE

Chairs: **J. Goverman, T. Forsthuber**

| | | |
|-------------|--|-------------------|
| 13.30-14.00 | Breaking CD8+ T cell tolerance to myelin basic protein by viral infection | Joan Goverman |
| 14.00-14.30 | The dual face role of alpha B-crystallin in MS | Hans Van Noort |
| 14.15-14.45 | Defining molecular tipping points between CNS neurodegeneration and neurodegeneration the impact of regulating microglial response | Monica Carson |
| 15.00-15.30 | T cell tolerance to neuroantigens mediated by HLA-DR2 haplotype molecules | Thomas Forsthuber |
| 15.30-16.00 | COFFEE BREAK | |

ROOM A

16.00-17.30

WORKSHOP: IMMUNOTHERAPY

Chairs: **D. Cribbs**

1 - INCREASED EXPRESSION OF PROINFLAMMATORY CYTOKINES BY PERIPHERAL BLOOD LEUKOCYTES DURING NATALIZUMAB TREATMENT IN PATIENTS WITH MULTIPLE SCLEROSIS -

Kivisäkk Pia^{*[1]}, Healy Brian^[1], Quintana Francisco^[1], Weiner Howard^[1], Khoury Samia^[1]

^[1]Brigham and Women's Hospital ~ Boston ~ United States

2 - DIFFERENT CHAPERONE USAGE BY IL-12 AND IL-23 DURING THEIR ASSEMBLY REVEALS NOVEL TARGETS FOR INTERVENTION WITH CYTOKINE SECRETION IN NEUROINFLAMMATION -

McLaughlin Martin^{*[2]}, Alloza Iraide^[3], Vandenbroeck Koen^[3]

^[2]Queens University Belfast ~ Belfast ~ United Kingdom - ^[3]Universidad Del Pais Vasco ~ Leioa ~ Spain

3 - NATALIZUMAB DISPROPORTIONATELY INCREASES CIRCULATING PRE-B AND B CELLS IN MULTIPLE SCLEROSIS -

Krumbholz Markus^{*[3]}, Meinel Ingrid^[4], Kämpfel Tania^[4], Hohlfeld Reinhard^[4], Meinel Edgar^[3]

^[3]Max Planck Institute of Neurobiology ~ Martinsried ~ Germany - ^[4]Institute for Clinical Neuroimmunology, LMU ~ Munich ~ Germany

4 - GENOME-WIDE RNA EXPRESSION ANALYSIS OF TWO YEAR INTERFERON BETA 1A SC TREATED MULTIPLE SCLEROSIS PATIENTS DISCLOSE CONSISTENT UPREGULATION OF THERAPY (UN)RELATED GENES -

Goertsches Robert^{*[1]}, Hecker Michael^[2], Koczan Dirk^[1], Thiesen Hans-Jürgen^[1], Zettl Uwe^[1]

^[1]University ~ Rostock ~ Germany - ^[2]Hans Knöll Institute ~ Jena ~ Germany

5 - DIVERSITY IN THE MAJOR ASS B-CELL EPITOPE AMONG DIFFERENT MAMMALS: AFFECT ON VACCINE DESIGN, SAFETY, AND EFFICACY OF IMMUNOTHERAPY FOR ALZHEIMER'S DISEASE -

Cribbs David^{*[1]}, Head Elizabeth^[1], Vasilevko Vitaly^[1]

^[1]University of California Irvine ~ Irvine ~ United States

6 - EXPLORING THE IMMUNOMODULATORY PROPERTIES OF HUMAN NEURAL STEM/PRECURSOR CELLS -

Cossetti Chiara^{*[1]}, De Feo Donatella^[1], Martino Gianvito^[1], Pluchino Stefano^[1]

^[1]San Raffaele Scientific Institute ~ Milano ~ Italy

ROOM B

16.00-17.30

WORKSHOP: REGULATORY MECHANISMSChairs: **A. Cross****1 - GLYCOSYLATION-DEPENDENT SUPPRESSION BY CD4+CD25+ REGULATORY T CELLS IN EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS -**

Rossi Barbara*^[1], Angiari Stefano^[2], Piccio Laura^[3], Zinselmeyer Bernd^[3], Bach Simone Dorothea^[1], Martinello Marianna^[1], Cross Anne^[3], Miller Mark^[3], Constantin Gabriela^[1]

^[1]University of Verona ~ Verona ~ Italy - ^[2]University of Verona ~ Verona ~ Italy - ^[3]Washington University St Louis ~ St Louis ~ United States

2 - EXOSOMES ARE ASSOCIATED WITH PREGNANCY-INDUCED SUPPRESSION OF EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS -

Williams Jessica*^[1], Song Fei^[1], Smith Kristen^[1], Kithcart Aaron^[1], Mavrikis Gina^[1], Whitacre Caroline C^[1]

^[1]The Ohio State University ~ Columbus, OH ~ United States

3 - CD4+FOXP3+ T REGULATORY CELLS INHIBIT EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS VIA DISTINCT IL-10 DEPENDENT AND IL-10 INDEPENDENT MECHANISMS -

Davidson Todd*^[1], Shevach Ethan^[1]

^[1]National Institute of Allergy and Infectious Disease, NIH ~ Bethesda, MD ~ United States

4 - TOLERANCE INDUCTION BY INTRATHYMIC ADMINISTRATION OF A LENTIVIRAL VECTOR ENCODING THE MYELIN OLIGODENDROCYTE GLYCOPROTEIN PREVENTS EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS -

Siatskas Christopher^[1], Emerson-Webber Ashley^[1], Sun Guizhi^[1], Wang Shunhe^[1], Bernard Claude*^[1]

^[1]Monash University ~ Clayton ~ Australia

5 - HUMAN CD4+ CD25HIGH CELLS INCLUDE BOTH PROINFLAMMATORY T CELLS AND T REGULATORY CELLS: IMPLICATIONS FOR MULTIPLE SCLEROSIS -

Di Mitri Diletta*^[1], Kleinewietfeld Markus^[2], Diamantini Adamo^[1], Starke Mireille^[2], Centonze Diego^[3], Bernardi Giorgio^[3], Gasperini Claudio^[4], Galgani Simona^[4], Falk Kirsten^[2], R tzschke Olaf^[2], Battistini Luca^[1], Borsellino Giovanna^[1]

^[1]Neuroimmunology Unit, Santa Lucia Foundation Scientific Institute ~ Rome ~ Italy - ^[2]Max-Delbrück-Center for Molecular Medicine (MDC) ~ Berlin ~ Germany - ^[3]Department of Neuroscience, University of Rome "Tor Vergata" ~ Rome ~ Italy -

^[4]Department of Neuroscience, San Camillo Hospital ~ Rome ~ Italy

6 - RAPAMYCIN INHIBITS RELAPSING EAE BY ENCEPHALITOGENIC T CELLS SUPPRESSION AND NOT THROUGH TREG EXPANSION -

Esposito Marianna*^[1], Ruffini Francesca^[1], Bellone Matteo^[1], Martino Gianvito^[1], Furlan Roberto^[1]

^[1]San Raffaele Scientific Institute ~ Milano ~ Italy

ROOM C

16.00-17.30

WORKSHOP: LATE BREAKING ABSTRACTSChairs: **R. Liblau****1 - DEVELOPMENT AND CHARACTERIZATION OF A TAPIR-LIKE MONOCLONAL ANTIBODY TO ABETA -**

Tabira Takeshi*^[1], Wang Jun^[1]

^[1]National Institute for Longevity Sciences ~ Obu ~ Japan

2 - MULTIPLE SCLEROSIS-LIKE LESIONS INDUCED BY EFFECTOR CD8 T CELLS RECOGNIZING A SEQUESTERED ANTIGEN ON OLIGODENDROCYTES -

Saxena Amit^[4], Bauer Jan^[5], Scheikl Tanja^[6], Zappulla Jaques^[7], Audebert Marc^[8], Desbois Sabine^[9], Waisman Ari^[10], Lassmann Hans^[11], Mars Lennart^[12], Liblau Roland*^[1,4]

^[4]Amit Saxena ~ toulouse ~ France - ^[5]Jan Bauer ~ vienna ~ Austria - ^[6]Tanja Scheikl ~ toulouse ~ France - ^[7]Jaques Zappulla ~ toulouse ~ France - ^[8]Marc Audebert ~ toulouse ~ France - ^[9]Sabine Desbois ~ toulouse ~ France - ^[10]Ari Waisman ~ Mainz ~ Germany - ^[11]Hans Lassmann ~ Vienna ~ Austria - ^[12]Lennart Mars ~ toulouse ~ France - ^[1,4]Roland Liblau ~ Toulouse ~ France



3 - TIM-3:GALECTIN-9 PATHWAY PROTECTS AGAINST CNS AUTOIMMUNITY BY EXPANDING MYELOID-DERIVED SUPPRESSOR CELLS -

Anderson Ana^{*[1]}, Dardalhon Valerie^[1], Karman Jozsef^[1], Chandwaskar Rucha^[1], Lee David H.^[1], Cornejo Melanie^[1], Nishi Nozomu^[2], Yamauchi Akira^[2], Sobel Raymond A.^[3], Hirashima Mitsuomi^[2], Kuchroo Vijay K.^[1]

^[1]Harvard Medical School ~ Boston ~ United States - ^[2]Kagawa University ~ Takamatsu ~ Japan - ^[3]Stanford University ~ Palo Alto ~ United States

4 - CNS-SPECIFIC, AUTOREACTIVE CD8+ T CELLS HAVE A REGULATORY ROLE IN AUTOIMMUNE DEMYELINATION -

York Nathan^{*[1]}, Mendoza Jason^[1], Benagh Andrew^[1], Firan Mihail^[1], Karandikar Nitin^[1]

^[1]UT Southwestern Medical Center at Dallas ~ Dallas ~ United States

5 - MECHANISMS FOR REGULATORY T CELL NEUROPROTECTION OF NEUROTOXIC RESPONSES MEDIATED BY NITRATED ALPHA-SYNUCLEIN STIMULATED MICROGLIA -

Reynolds Ashley^{*[1]}, Stone David^[1], Banerjee Rebecca^[1], Ciborowski Pawel^[1], Mosley R Lee^[1], Gendelman Howard^[1]

^[1]University of Nebraska Medical Center ~ Omaha ~ United States

6 - PRIMARY OLIGODENDROCYTE DEATH DOES NOT CAUSE AUTOIMMUNITY -

Freese Simone^{*[2]}, Frommer Friederike^[3], Thorsten Buch^[4], Locatelli Giuseppe^[5], Bechman Ingo^[6], Karram Khalad^[7], Trotter Jacqueline^[8], Becher Burkhard^[9], Waisman Ari^[10]

^[2] I. Medical Department, Johannes Gutenberg-University Mainz ~ Mainz ~ Germany - ^[3] I. Medical Department, Johannes Gutenberg-University Mainz ~ Mainz ~ Germany - ^[4]Department of Pathology, Institute of Experimental Immunology, University of Zurich ~ Zürich ~ Switzerland - ^[5]Department of Pathology, Institute of Experimental Immunology, University of Zurich ~ Zürich ~ Switzerland - ^[6]Dr. Senckenbergische Anatomie, Institute for Clinical Neuroanatomy, Johann Wolfgang Goethe-University ~ Frankfurt am Main ~ Germany - ^[7]Molecular Cell Biology, Department of Biology, Johannes Gutenberg University of Mainz ~ Mainz ~ Germany - ^[8]Molecular Cell Biology, Department of Biology, Johannes Gutenberg University of Mainz ~ Mainz ~ Germany - ^[9]Department of Pathology, Institute of Experimental Immunology, University of Zurich ~ Zürich ~ Germany - ^[10]I. Medical Department, Johannes Gutenberg-University Mainz ~ Mainz ~ Germany

ROOM D

16.00-17.30 **WORKSHOP: NERVOUS SYSTEM INFECTIONS**

Chairs: **T. Lane**

1 - DEVELOPMENT OF A MODEL ALLOWING STUDY OF THE EARLY STAGES OF DEMYELINATION -

Drescher Kristen^{*[1]}, Tracy Steven^[2]

^[1]Creighton University ~ Omaha ~ United States - ^[2]University of Nebraska Medical Center ~ Omaha ~ United States

2 - INCLUSION BODY MYOSITIS WITH HUMAN T-LYMPHOTROPIC VIRUS-TYPE I INFECTION -

Umehara Fujio^{*[2]}

^[2]Kagoshima University ~ Kagoshima ~ Japan

3 - THE GENETIC DISSECTION OF HERPES SIMPLEX ENCEPHALITIS (HSE) IN CHILDREN -

Sancho Shimizu Vanessa^{*[1]}, Zhang Shen Ying^[1], Lorenzo Lazaro^[1], Pauwels Elodie^[1], Tardieu Marc^[2], Abel Laurent^[1], Jouanguy Emmanuelle^[1], Casanova Jean Laurent^[1]

^[1]NSERM U550 Necker-Enfants Malades Medical School ~ Paris ~ France - ^[2]Bicetre Hospital University Paris Sud ~ Paris ~ France

4 - DIFFERENTIAL ROLES FOR ELR+ CHEMOKINES IN HOST DEFENSE FOLLOWING VIRAL-INDUCED ENCEPHALOMYELITIS AND DEMYELINATION -

Hosking Martin^{*[1]}, Lane Thomas^[1]

^[1]University of California, Irvine ~ Irvine ~ United States

5 - CXCR4 ANTAGONISM INCREASES T CELL TRAFFICKING IN THE CENTRAL NERVOUS SYSTEM AND IMPROVES SURVIVAL FROM WEST NILE VIRUS ENCEPHALITIS -

McCandless Erin^[1], Zhang Bo^[1], Diamond Michael^[1], Klein Robyn ^{*[1]}

^[1]Washington University School of Medicine ~ St. Louis ~ United States

6 - BOTH TLR2 AND TLR4 ARE REQUIRED FOR THE EFFECTIVE IMMUNE RESPONSE IN STAPHYLOCOCCUS AUREUS-INDUCED EXPERIMENTAL MURINE BRAIN ABSCESS -

Werner Stenzel^[1], Sabine Soltek^[2], Monica Sanchez-Ruiz^[1], Shizuo Akira^[3], Hrvoje Miletic^[1], Dirk Schlüter^[4] and Martina Deckert^[1]

^[1]From the Abteilung für Neuropathologie, Universität zu Köln, Köln, Germany - ^[2]Universitätsklinikum Mannheim, Universität Heidelberg, Mannheim, Germany - ^[3]The Department of Host Defense, Research Institute for Microbial Diseases, Osaka University and ERATO of Japan Science and Technology Corporation, Osaka, Japan - ^[4]The Institut für Medizinische Mikrobiologie, Otto-von-Guericke Universität Magdeburg, Magdeburg, Germany

ROOM E

16.00-17.30 **WORKSHOP: NEUROPROTECTION**

Chairs: **C. Kijstra**

1 - T HELPER CELLS STIMULATE AXON REGENERATION VIA AKT/MAPK-DEPENDENT INTERLEUKIN-4 SIGNALING -

Hendrix Sven^[1], Hechler Daniel^[1], Sallach Stephanie^[1], Golz Greta^[1], Kammertons Thomas^[1], Luedecke Doreen^[1], Schnell Lisa^[2], Brandt Christine^[1], Rosenberger Karen^[1], Luhder Fred^[3], Gold Ralf^[3], Schwab Martin^[2], Siffrin Volker^[4], Zipp Frauke^[4], Nitsch Robert^[1]

^[1]Institute for Cell Biology and Neurobiology, Center for Anatomy, Charité ~ Berlin ~ Germany - ^[2]Brain Research Center ~ Zurich ~ Switzerland - ^[3]Institute for Multiple Sclerosis Research ~ Göttingen ~ Germany - ^[4]Cecilie-Vogt-Clinics ~ Berlin-Buch ~ Germany

2 - MYELIN REPAIR IS ACCELERATED BY INACTIVATING CXCR2 ON NON-HEMATOPOIETIC CELLS -

Liping Liu^[1], Taofang Hu^[1], Lindsay Darnall^[1], Astrid Cardona^[1], Abdelmajid Belkadi^[2], Robert Miller^[2], Richard Ransohoff^[1]

- ^[1]Cleveland Clinic ~ Cleveland ~ United States - ^[2]Case Western Reserve University ~ Cleveland ~ United States

3 - A HOMOGENEOUS PATTERN OF ACTIVE DEMYELINATION IN PATIENTS WITH ESTABLISHED MULTIPLE SCLEROSIS

Breij Esther^[1], Brink Bianca^[1], Veerhuis Rob^[1], van den Berg Christa^[1], Vloet Rianka^[1], Yan Riqiang^[2], Dijkstra Christien^[1], van der Valk Paul^[1], B Lars^[3]

^[1]VU Medical Center ~ Amsterdam ~ Netherlands - ^[2]Lerner Research Institute ~ Cleveland ~ United States - ^[3]Haukeland University Hospital, University of Bergen ~ Bergen ~ Norway

4 - ADAMI0 IS CRITICALLY INVOLVED IN AXONAL OUTGROWTH OF THE PERIPHERAL NERVE -

Jangouk Parastoo^[1], Dehmel Thomas^[1], Bernal Fabian^[1], Ludwig Andreas^[2], Hartung Hans-Peter^[1], Lehmann Helmar^[1], Kieseier Bernd C.^[1]

^[1]Heinrich-Heine University of Düsseldorf ~ Düsseldorf ~ Germany - ^[2]University Hospital Aachen ~ Aachen ~ Germany

5 - HARNESSING BENEFICIAL INFLAMMATION FOR CNS REPAIR USING THE MS MEDICATION, GLATIRAMER ACETATE -

Skihar Viktor^[1], Silva Claudia^[1], Yong Y. Wee^[1]

^[1]University of Calgary ~ Calgary ~ Canada

6 - THE DUTCH MS PREGNANCY STUDY; IMMUNEPARAMETERS ASSOCIATED WITH DISEASE ACTIVITY -

Verbraak Evert^[1], Neuteboom Rinze^[1], Voerman Jane^[1], van Meurs Marjan^[1], Wierenga Annet^[1], Steegers Eric^[1], de Groot C^[2], Laman Jon^[1], Hintzen Rogier^[1]

^[1]Erasmus MC ~ Rotterdam ~ Netherlands - ^[2]Medisch centrum Haaglanden ~ The Hague ~ Netherlands

BALLROOM

17.30-19.00 **POSTER VIEWING**