

POSTER PROGRAM

Behavioural adaptations to stress and coping and their consequences

- [P01] **Behavioural correlates of the equine stereotypy phenotype**
M. Parker^{*1}, E. Redhead¹, D. Goodwin¹, S. McBride², ¹*University of Southampton, UK*,
²*University of Wales, UK*
- [P02] **Internalization of negative age perceptions is associated with high cortisol levels and depressive symptomatology in older adults**
S. Sindi^{*12}, N.P.V. Nair¹², F. Ng¹², G. Schwartz¹², N. Wan¹², S. Lupien¹², ¹*McGill University, Canada*, ²*Douglas Institute, Canada*
- [P03] **Corticotropin-releasing factor receptor antagonism within the dorsal raphe nucleus reduces social anxiety-like behavior following early-life social isolation**
J.L. Lukkes^{*}, S. Vuong, J.L. Scholl, H. Oliver, G.L. Forster, *University of South Dakota, USA*
- [P04] **Neural correlates of an adaptive coping style: A functional MRI study**
A. Sekiguchi^{*1,2}, M. Sugiura¹, S. Yokoyama¹, Y. Sassa³, R. Kawashima^{1,3}, ¹*Tohoku University, Japan*, ²*Kyushu University, Japan*, ³*IDAC, Japan*
- [P05] **Illustrating the inverted U-shape effect for the impact of stress on hippocampus-dependent learning and memory: Performance and the memory of performance**
B. Salehi^{*}, M.I. Cordero, C. Sandi, *EPFL, Switzerland*
- [P06] **Depression-like behavior in rat dams induced by prolonged, repeated maternal separation is ameliorated by continuous provision of palatable high-fat diet**
M.J. Morris^{*}, J. Maniam, *University of New South Wales, Australia*
- [P07] **The medial prefrontal cortex is necessary for the modulatory effects of acute stress on learning in females but not in males**
T.J. Shors, L.Y. Maeng^{*}, J. Waddell, *Rutgers University, USA*
- [P08] **Behavioural changes following rapid amygdala kindling epileptogenesis in rats exposed to early life stress**
G. Kumar^{*1}, N.C. Jones¹, M.J. Morris², S.M. Rees¹, T.J. O'Brien¹, M.R. Salzberg¹, ¹*The University of Melbourne, Australia*, ²*University of New South Wales, Australia*
- [P09] **Impact of pride at work on burnout in Korean fire fighters with posttraumatic stress disorder**
S.H. Kim^{*}, S.M. Cho, J.A. Kim, Y.K. Chung, *Ajou University School of Medicine, Korea*
- [P10] **Chronic psychosocial stress during pregnancy affects behaviour and neuroendocrine parameters in late pregnant and lactating rats**
D.A. Slattery^{*}, K. Hillerer, I.D. Neumann, *University of Regensburg, Germany*
- [P11] **Effects of acute stress on the evening of proestrus on sexual behaviour in female rats: Participation of the angiotensinergic system**
A.L. Ceconello, A.B. Lucion^{*}, G.I. Sanvitto, *Universidade Federal do Rio Grande do Sul, Brazil*
- [P12] **Phenotypic analysis of neuronal activation in limbic brain regions following anxiogenic behavioral tasks or ethanol**
L.C. White^{*}, D. Frederick-Duus, L. Junor, K. Ford, J.R. Fadel, M.A. Wilson, *USC School of Medicine, USA*
- [P13] **Dominant rats display increased risk taking behavior and motivation for food reward**
J. Davis^{*}, E. Krause, R. Sakai, *University of Cincinnati, USA*
- [P14] **Effects of chronic social stress on behavior and amygdalar neuropeptide y mRNA expression**
S.J. Melhorn^{*}, K.A. Scott, E.G. Krause, R.R. Sakai, *University of Cincinnati, USA*

- [P15] **Consuming alcohol during chronic stress antagonizes impairments in spatial memory**
J.L. Gomez*^{1,2}, V. Luine^{1,2}, M.J. Lewis^{1,2}, ¹*Hunter College, USA*, ²*The Graduate Center of CUNY, USA*
- [P16] **Influence of social housing on behaviour and stress responsivity of offspring**
K.A. Scott*, S.J. Melhorn, E.G. Krause, R.R. Sakai, *University of Cincinnati, USA*
- [P17] **The effect of emotion regulation on the response to emotional challenge: A comparison of conscious and nonconscious emotion regulation goals**
S.M. Dolcos, C. Edgington, N. Dalmer, S. Tomlinson, K. Sung, F. Dolcos*, *University of Alberta, Canada*
- [P18] **The effect of cognitive therapy on the neural correlates of emotion processing in depression: An event-related fMRI investigation**
M. Ritchey¹, F. Dolcos*^{1,2}, K.M. Eddington^{1,3}, T.J. Strauman¹, R. Cabeza¹, ¹*Duke University, USA*, ²*University of Alberta, Canada*, ³*University of North Carolina Greensboro, USA*
- [P19] **The role of emotion regulation strategies in coping with social anxiety**
R. Wang, S.M. Dolcos, S. Tomlinson, G. Wong, T. Penney, F. Dolcos*, *University of Alberta, Canada*

Cellular adaptations to stress and their consequences

- [P20] **What changes in the brain with chronic stress? Characterising the forebrain Δ fosB response following exposure to two different forms of psychological stress**
F.R. Walker*, M. Hinwood, T.A. Day, *University of Newcastle, Australia*
- [P21] **Repeated exposure to stress produces differential effects on reelin and synaptophysin expression in the amygdala and hippocampus**
A.L. Lussier*¹, H.J. Caruncho², L.E. Kalynchuk¹, ¹*University of Saskatchewan, Canada*, ²*University of Santiago de Compostela, Spain*
- [P22] **Down-regulation of reelin in an animal model of depression is reversed by antidepressants and correlates with alterations in neural integration in the adult dentate gyrus**
E.Y. Fenton*¹, N.M. Fournier¹, A.L. Lussier¹, H.J. Caruncho², L.E. Kalynchuk¹, ¹*University of Saskatchewan, Canada*, ²*University of Santiago de Compostela, Spain*
- [P23] **Effects of chronic stress and estrogen on spine density in the prefrontal cortex**
R.M. Shansky*¹, C. Hamo¹, B.S. McEwen², J.H. Morrison¹, ¹*Mount Sinai School of Medicine, USA*, ²*Rockefeller University, USA*
- [P24] **The cortical layer specificity in physiological effects of electroconvulsive therapy in a rat model**
N. Kato*¹, Y. Ueta¹, K. Yamamoto^{1,2}, R. Yamamoto¹, T. Sugai¹, ¹*Kanazawa Medical University, Japan*, ²*Utano National Hospital, Japan*
- [P25] **Histochemistry and ultrastructure of noradrenaline-storing granules in human adrenal medulla and locus coeruleus which coordinate the stress response**
P. Spiliopoulos¹, I. Kloukina¹, S. Havaki¹, M. Chrysanthou-Piterou^{1,2}, A. Karameris³, M.R. Issidorides*^{1,2}, ¹*Neurobiology Research Institute, Greece*, ²*University of Athens, Greece*, ³*417 VA Army Hospital, Greece*

Molecular adaptations to stress and their consequences

- [P26] **Effects of immobilization stress on neurochemical markers in the motivational system of the male rat**
L.R. Lucas^{*1}, C.J. Wang³, T.M. McCall², B.S. McEwen², ¹Loyola University Chicago, USA, ²Rockefeller University, USA, ³Mount Sinai Medical School, USA
- [P27] **The study of BDNF in stress-sensitive rats and in postmortem brains of major depressive subjects**
F. Karege^{*1}, E. Ballmann¹, P. Schulz², R. La Harpe³, A. Malafosse¹, T.H. Steimer², ¹Department of Genetics, Switzerland, ²Department of Pharmacology, Switzerland, ³Institute of Forensic Medicine, Switzerland
- [P28] **Differential expression of CaMKII, BDNF and calcineurin in the hippocampus and amygdala in response to spatial learning and predator stress-induced amnesia**
M. Srivareerat¹, K.H. Alzoubi², K.A. Alkadhi¹, P.R. Zoladz^{*3,4}, C.R. Park^{3,4}, J.D. Halonen^{3,4}, ¹University of Houston, USA, ²Jordan University of Science and Technology, Jordan, ³University of South Florida, USA, ⁴VA Hospital, USA
- [P29] **Activation of the memory of a traumatic experience increases CREB phosphorylation in the rat hippocampus**
R.M. Philpot¹, D.M. Diamond¹², P.R. Zoladz^{*12}, J.D. Halonen¹², M.E. Engberg¹, M. Fleshner³, ¹University of South Florida, USA, ²VA Hospital, USA, ³University of Colorado, USA
- [P30] **Motherhood increases BDNF, arc and long-term potentiation in the rat brain: Reversal by the offspring separation**
G. Biggio^{*1,2}, P.P. Secci¹, M.L. Mura¹, L. Murru², E. Sanna¹, M.C. Mostallino², ¹University of Cagliari, Italy, ²CNR Institute of Neuroscience, Italy
- [P31] **Maternal separation alters nerve growth factor and corticosterone levels but not the DNA methylation status of the exon 1₇ glucocorticoid receptor promoter region**
W.M.U. Daniels^{*12}, L. Fairbairn², G. Van Tilburg², L. Marais², C.R.E. McEvoy², D.J. Stein³, ¹University of KwaZulu-Natal, South Africa, ²University of Stellenbosch, South Africa, ³University of Cape Town, South Africa
- [P32] **The glucocorticoid receptor antagonists RU486 and an Organon glucocorticoid receptor antagonist have differential effects on glucocorticoid receptor nuclear translocation and DNA binding in vivo in brain and pituitary of rat**
F. Spiga¹², ¹University of Bristol, UK, ²Organon Laboratories Limited part of Schering-Plough Corporation, UK
- [P33] **Elevated plasma IL-6 response to stress in healthy adults with early life adversity**
L.L. Carpenter^{*1}, A.R. Tyrka¹, G.M. Anderson², L.H. Price¹, ¹Butler Hospital, Brown, USA, ²Yale School of Medicine, USA
- [P34] **5-HT_{1B} autoreceptors regulate expression of conditioned fear in a stress-dependent manner**
R.A. McDevitt^{*}, N.C. Robin, R. Hiroi, J.F. Neumaier, *University of Washington, USA*
- [P35] **Effect of stress on tyrosine hydroxylase (TH) gene expression and TH immunoreactive perikarya in rat paraventricular nucleus: Changes after deafferentation**
R. Kvetnansky^{*1}, B. Mravec¹, M. Palkovits², A. Kiss¹, ¹Slovak Academy of Sciences, Slovakia, ²Semmelweis University of Medical School and Hungarian Academy of Sciences, Hungary
- [P36] **Glucocorticoid receptor dependent gene expression in mouse striatum during acquisition of morphine conditioned place preference**
R.A. Przewlocki^{*}, E. Kostrzewa, M. Piechota, M. Korostynski, A. Gieryk, W. Solecki, *Institute of Pharmacology PAS, Poland*

- [P37] **Drugs of abuse activate glucocorticoid receptor regulated genes in the mouse striatum**
M. Piechota*, M.Korostynski, A. Gieryk, R.A. Przewlocki, *Institute of Pharmacology PAS, Poland*
- [P38] **Mice with forebrain overexpression of the glucocorticoid receptor show altered basal- and stress-regulation of the fibroblast growth factor system**
E.K. Hebda-Bauer*, T.A. Simmons, Q. Wei, S.J. Watson, H. Akil, *University of Michigan, USA*
- [P39] **BDNF expression is differentially expressed in varying rat strains due to prenatal stress**
E.W. Neeley*¹, R. Berger¹, J.I. Koenig², S. Leonard¹, ¹*UCHSC at Fitzsimons, USA*, ²*Maryland Psychiatric Research Center, USA*
- [P40] **Neuropeptide Y (NPY) and posttraumatic stress disorder (PTSD): Studies in a rodent model of chronic variable stress**
J.L. McGuire*, J.P. Herman, F.R. Sallee, R. Sah, *University of Cincinnati, USA*
- [P41] **Epigenetic adaptations in offspring resulting from maternal prenatal stress**
K.L.K. Tamashiro*¹, R.S. Lee¹, T.J. Johnson¹, J.I. Koenig², J.B. Potash¹, T.H. Moran¹, ¹*Johns Hopkins School of Medicine, USA*, ²*University of Maryland School of Medicine, USA*
- [P42] **Reported childhood maltreatment linked to shortened telomere length in healthy adults: A pilot study**
A.R. Tyrka*, L.H. Price, H.T. Kao, B. Porton, L.L. Carpenter, *Butler Hospital, USA*

Neuroendocrine adaptations to stress and their consequences

- [P43] **Corticosterone-dependent and corticosterone-independent effects of predator stress on the consolidation versus retrieval of long-term spatial memory**
C.R. Park*¹³, P.R. Zoladz¹³, M. Fleshner², D.M. Diamond¹³, ¹*University of South Florida, USA*, ²*University of Colorado, USA*, ³*VA Hospital, USA*
- [P44] **Psychosocial stress induced cortisol response, basal cortisol level, and cognitive aging**
J. Lee*, J. Chey, S. Lee, H. Kim, *Seoul National University, Korea*
- [P45] **The role of alpha and beta adrenergic receptors in corticotropin-releasing factor and stressor-induced changes in the acoustic startle response**
J.E. Gresack*, C.K. Wallace, M.A. Geyer, V.B. Risbrough, *University of California, USA*
- [P46] **The effects of oxytocin in schizophrenic patients with enhanced stress responses and diminished hippocampal volumes**
A. Gomes¹, R. Lee¹, S.C. Carter², M.B. Goldman*¹, ¹*University of Chicago, USA* ²*University of Illinois at Chicago, USA*
- [P47] **Cortisol and physiological crash in a marathon runner: A case study of monozygotic twins**
H.L. Mudie, A.M. Morley, B.F. Hornby, M.P. Roy*, *University of Central Lancashire, UK*
- [P48] **Gender differences in neuroendocrine response to chronic stress**
J.C. Mingote*, A. Delmiro, A. Gozalo, M. López-Espino, R. Jurado, T. Palomo, *12 de Octubre University Hospital, Spain*
- [P49] **Underlying mechanisms of adrenal insufficiency after exposure to chronic psychosocial stress in mice**
S.O. Reber*¹, N. Uschold¹, O.J. Bosch¹, A. Ohlmann², E.R. Tamm², I.D. Neumann¹, ¹*Institute of Zoology, Germany*, ²*Institute of Human Anatomy and Embryology, Germany*
- [P50] **Early stress and vulnerability to affective and cognitive disorders in rodent: Role of the HPA axis activity**
S. Maccari*, M. Darnaudery, S. Morley-Fletcher, *University of Lille 1, France*

- [P51] **Emotional numbing, vulnerability and resilience: A study of cortisol and DHEA in victims of urban violence**
A. Vieira, I. Figueira, E. Volchan*, *Federal University of Rio de Janeiro, Brazil*
- [P52] **Social stress, visceral obesity, and coronary artery atherosclerosis in female primates**
C.A. Shively*, T.C. Register, S.L. Willard, T.B. Clarkson, *Wake Forest University School of Medicine, USA*
- [P53] **The role of the hypothalamic-pituitary-adrenal (HPA) axis in an animal model of binge-like ethanol consumption**
E.G. Lowery*¹, A.M. Sparrow¹, T.E. Thiele^{1,2}, ¹*University of North Carolina, USA*, ²*Bowles Center for Alcohol Studies, USA*
- [P54] **Diurnal cortisol secretion, psychopathology, and maltreatment in adolescent girls**
K. Pajer*, W. Gardner, W. Wang, *Ohio State University College of Medicine, USA*
- [P55] **Neuroticism and morning salivary cortisol levels predict proinflammatory response in Mexican-Americans**
D.L. Mangold*¹, G.S. Wand², ¹*The University of Texas at San Antonio, USA*, ²*The Johns Hopkins University, USA*
- [P56] **Stress response and the adolescent transition: Evidence for SHRP in humans?**
L.R. Stroud*¹, E. Foster¹, G.D. Papandonatos¹, K. Handwerker², D.A. Granger³, K. Kivlighan⁴, ¹*Brown University, USA*, ²*Tufts University, USA*, ³*Penn State University, USA*, ⁴*Johns Hopkins University, USA*

New horizons in the neuroscience of stress and coping

- [P57] **The effect of stressful-experience on brain activation correlates with neuroticism**
R. Admon*^{1,2}, O. Stern¹, K. Rosenberg^{1,2}, G. Lubin³, T. Hendler^{1,2}, ¹*Tel Aviv Sourasky Medical Center, Israel*, ²*Tel Aviv University, Israel*, ³*Israeli Defense Forces, Israel*
- [P58] **Structural and neurophysiological findings in brains of murderers diagnosed posttraumatic and acute stress disorder (PTSD/ASD – DSM IV)**
J. Heitzman*^{1,2}, A. Silczuk², ¹*Chair in Psychiatry, Poland*, ²*Institute of Psychiatry and Neurology, Poland*
- [P59] **Unhealed wounds: Prior trauma modulates limbic brain response to aversive cues in cocaine-dependent patients**
C.A. Rudoy*¹, J. Suh^{1,2}, R. Ehrman^{1,2}, Y. Li¹, Z. Wang¹, W. Jens¹, ¹*University of Pennsylvania School of Medicine, USA*, ²*VA VISN 4 MIRECC, USA*
- [P60] **The “unseen” scar: Cocaine patients with prior trauma have enhanced amygdalar reactivity to aversive cues presented outside awareness**
A.R. Childress*^{1,2}, C.A. Rudoy¹, J. Suh^{1,2}, R. Ehrman^{1,2}, Z. Wang¹, Y. Li¹, ¹*University of Pennsylvania School of Medicine, USA*, ²*VA VISN 4 MIRECC, USA*
- [P61] **Antagonism of angiotensin type 1 receptors in the median eminence potentiates the HPA and cardiovascular responses to stress.**
E.G. Krause*¹, A.D. de Kloet^{1,2}, K.A. Scott^{1,2}, R.R. Sakai¹, ¹*University of Cincinnati, USA*, ²*Program in Neuroscience, USA*
- [P62] **Teneurin C-terminal associated peptide (TCAP): A new corticotrophin-releasing factor (CRF) regulating peptide**
L.A. Tan*, T. Nock, D. Barsyte-Lovejoy, F.J. Vaccarino, D.A. Lovejoy, S. Rotzinger, *University of Toronto, Canada*

- [P63] **Brief maternal separation increases gastric pre-autonomic viral transport to the paraventricular nucleus of the hypothalamus in juvenile rats**
L. Banihashemi*, L. Rinaman, *University of Pittsburgh, USA*
- [P64] **Administration of metyrapone decreases memory reactivation and reconsolidation in humans**
M.F. Marin*¹, A. Hupbach², S.J. Lupien¹, ¹*Université de Montréal, Canada*, ²*University of Arizona, USA*
- [P65] **When more stress hormone is good: Reduced interference in a stroop task associated with higher salivary cortisol**
M.T. Sutherland*, Z. Yang, A.C. Tang, *University of New Mexico, USA*
- [P66] **Who performs better under interference? Prediction from stress response profile**
Z. Yang*, M.T. Sutherland, A.C. Tang, *University of New Mexico, USA*
- [P67] **Predicting adult stress response by neonatal events**
Z. Yang*¹, R.D. Romeo², A.M. Korzekwa¹, B.C. Reeb¹, B.S. McEwen², A.C. Tang¹, ¹*University of New Mexico, USA*, ²*Rockefeller University, USA*

General

- [P68] **Chronic fluoxetine treatment decreases glucocorticoid receptor and corticotropin-releasing hormone gene expression in the central amygdala: Relevance to anxiety disorders**
W. Heydendael, L. Jacobson*, *Albany Medical College, USA*

Post-traumatic stress disorder – diagnosis, treatment and vulnerability factors

- [P69] **Auditory sensory gating and superior temporal gyrus cortical thickness in post-traumatic stress disorder**
M.A. Hunter*¹², G. Villarreal², G.R. McHaffie², B.J. Jimenez², A.K. Smith², J.M. Canive², ¹*Clinical Neuroscience Research Program, USA*, ²*The University of New Mexico, USA*
- [P70] **A monocyte gene expression profile for PTSD in women**
L. Pulliam*¹², B. Sun¹, T. Neylan¹², ¹*Veterans Affairs Medical Center, USA*, ²*University of California, USA*
- [P71] **Validation of an animal model of PTSD: Psychosocial stress in rats produces a reduction in basal glucocorticoid levels and an increase in sensitivity in the dexamethasone suppression test**
P.R. Zoladz*¹³, M. Fleshner², D.M. Diamond¹³, ¹*University of South Florida, USA*, ²*University of Colorado, USA*, ³*VA Hospital, USA*
- [P72] **Differential effectiveness of tianeptine, clonidine and amitriptyline in blocking PTSD-like physiological and behavioral sequelae in rats**
C. Munoz², P.R. Zoladz*¹³, D.M. Diamond¹³, ¹*University of South Florida, USA*, ²*Servier International, France*, ³*VA Hospital, USA*
- [P73] **Daily social stimulation blocks the development of conditioned fear and heightened anxiety in an animal model of PTSD**
S. Seetharaman*¹, P.R. Zoladz¹², J.D. Halonen¹², D.M. Diamond¹², ¹*University of South Florida, USA*, ²*VA Hospital, USA*

- [P74] **Neoclassical fear conditioning with the CS and US presented in different contexts: Adverse effects of combined administration of d-cycloserine and propranolol on extinction**
J.D. Halonen*¹², P.R. Zoladz¹², D.M. Diamond¹², ¹University of South Florida, USA, ²VA Hospital, USA
- [P75] **Peritraumatic tonic immobility predicts PTSD symptoms severity**
V. Rocha-Rego¹, L.C. Portugal², M.G. Pereira², E.S.F. Coutinho³, I. Figueira¹, E. Volchan*¹, ¹Federal University of Rio de Janeiro, Brazil, ²Federal Fluminense University, Brazil, ³Oswaldo Cruz Foundation, Brazil
- [P76] **Facilitation of contextual fear memory extinction and anti-anxiogenic effects of AM404 and cannabidiol in conditioned rats**
R.M. Bitencourt, F.A. Pamplona, R.N. Takahashi*, UFSC, Brazil
- [P77] **Biochemical and immunological stress markers allow a functional assessment of patients with a post-traumatic stress disorder**
J.C. Mingote*, A. Delmiro, A. Gozalo, R. Jurado, M. López-Espino, T. Palomo, 12 de Octubre University Hospital, Spain
- [P78] **Long-lasting effects of exposure to cat odor on anxiety-like behavior but not on hypothalamus-pituitary-adrenal function**
C. Muñoz-Abellan¹², R. Nadal¹³, A. Armario*¹², ¹Institute of Neuroscience, Spain, ²School of Biosciences, Spain, ³School of Psychology, Spain
- [P79] **A single exposure to immobilization caused long-lasting deficit in spatial learning in adult male rats**
R. Andero¹², C. Rabasa¹², N. Daviu¹², R.M. Escorihuela¹⁴, R. Nadal¹³, A. Armario*¹², ¹Institute of Neuroscience, Spain, ²School of Biosciences, Spain, ³School of Psychology, Spain, ⁴School of Medicine, Spain
- [P80] **β-adrenergic receptor is rather involved during memory reactivation than during memory reconsolidation**
P. Gisquet-Verrier*, C. Oualian, CNRS Université Paris Sud, France
- [P81] **Prior chronic nicotine exposure age-dependently enhances cued fear response**
H.C. Bergstrom*, C.G. McDonald, R.F. Smith, George Mason University, USA
- [P82] **N-3 poly unsaturated fatty acids deficiency as a risk factor for PTSD**
G. Mathieu², P. Gisquet-Verrier*¹, C. Oualian¹, S. Vancassel², ¹NAMC CNRS Université Paris Sud, France, ²NuRéLiCe INRA, France
- [P83] **Is PTSD due to hypersensitivity cue-driven memory reactivation?**
P. Gisquet-Verrier*, NAMC CNRS Université Paris Sud, France
- [P84] **Attentional deficits in anxiety disorders: Posttraumatic stress disorder and panic disorder**
R. Jurado¹, F. Denia¹, D. Taboada¹, M. Garcia¹, S. Frenández Guinea², J.C. Mingote*¹, ¹Hospital Universitario 12 de Octubre, Spain, ²Universidad Complutense de Madrid, Spain
- [P85] **Individual differences in anxiety predict the strength of Pavlovian fear conditioning in an outbred rat strain**
C. Venero*¹, E. Borcel¹, A.I. Herrero¹, L. Perez-Alvarez¹, C. Sandi², ¹UNED, Spain, ²Brain Mind Institute (EPFL), Switzerland

Stress and coping – human studies and animal models

- [P86] **Effects of stress on nicotine conditioned place preference in adolescent rats**
J.M. Brielmaier*, C.G. McDonald, R.F. Smith, George Mason University, USA

- [P87] **Object recognition in open and enclosed spaces: Neophobia, anxiety and memory**
A. Ennaceur^{*1}, S. Michalikova¹, P.L. Chazot², ¹University of Sunderland, UK, ²University of Durham, UK
- [P88] **An all-in-one-behavioural test for anxiety and memory**
A. Ennaceur^{*1}, S. Michalikova¹, P.L. Chazot², ¹University of Sunderland, UK, ²University of Durham, UK
- [P89] **The relationship between indices of stress and verbal memory**
A.D. Turner*, A Campbell, *Howard University, USA*
- [P90] **An in-vivo pain catastrophizing induction elicits il-6 response in a chronic pain sample**
B.D. Darnall^{*1}, H. Zwickey², B. Park¹, ¹Oregon Health & Science University, USA, ²National College of Natural Medicine, USA
- [P91] **Brain activation patterns in major depressive disorder and chronic burnout: A fMRI study**
A. Sandström*, R. Säll, J. Peterson, A. Larsson, T. Olsson, L. Nyberg, *Department of Public Health and Clinical Medicine, Sweden*
- [P92] **8-OH-DPAT (a 5-HT_{1A} agonist) prevents cardiac arrhythmias and moderates tachycardia in rats undergoing social defeat**
A. Sgoifo^{*1}, F. Mastorci¹, E. Nalivaiko², ¹University of Parma, Italy, ²University of Flinders, Australia
- [P93] **IL-1 receptor antagonist (IL-1Ra) KO mice shows behavioral abnormalities**
C. Wakabayashi*, Y. Iwakura, *University of Tokyo, Japan*
- [P94] **QTL for passive coping on chromosome X confirmed by congenic rat strain**
E.E. Redei^{*1}, B.M. Andrus¹, N. Ahmadiyah², K. Dennis¹, K. Saar³, P. Vedell⁴, ¹Northwestern University, USA, ²Brigham and Women's Hospital and Dana-Farber Cancer Institute, USA, ³Max-Delbrück Ctr. for Mol. Med., Germany, ⁴The Jackson Lab., USA
- [P95] **Examination of the interaction between stress history and chronic mild stress in female rats**
S.L. Baker*, S.L. Rees, C. Bielajew, *University of Ottawa, Canada*
- [P96] **Circadian and ultradian rhythmicity and stress responses in free corticosterone in the rat brain are altered by voluntary exercise**
S.K. Droste*, A. Collins, S.L. Lightman, A.C.E. Linthorst, J.M.H.M. Reul, *University of Bristol, UK*
- [P97] **Free corticosterone levels in the female rat hippocampus show a circadian as well as an ultradian rhythm**
A.C.E. Linthorst*, L. De Groote, S.L. Lightman, J.M.H.M. Reul, S.K. Droste, *University of Bristol, UK*
- [P98] **The use of humor as a coping strategy in depressed patients: A pilot study**
I. Falkenberg^{*1,2}, J. Jarmuzek², B. Wild², ¹RWTH Aachen University, Germany, ²University of Tübingen, Germany
- [P99] **Trier social stress test in the black box: Inducing social stress in a virtual environment**
P. Jönsson*, M. Wallergård, B. Karlson, G. Johansson, K. Österberg, F. Eek, *Lund University, Sweden*
- [P100] **Temporal relationship between stress experience and ethanol accessibility influences ethanol drinking in C57BL/6J mice**
M.F. Lopez^{*1}, H.C. Becker^{1,2}, ¹Medical University of South Carolina, USA, ²Charleston VAMC, USA

- [P101] **Behavioral responses to social defeat: A novel model for mood or anxiety disorders?**
S.A. LaRocca*, C.M. Markham, A.N. Faruzzi, K.L. Huhman, *Georgia State University, USA*
- [P102] **The effects of psychosocial stress on heart-rate responsivity and coping behaviour post traumatic brain injury**
K.M. Krpan*¹², D.T. Stuss³⁴, N.D. Anderson²¹, ¹*University of Toronto, Canada*, ²*Kunin-Lunenfeld Applied Research, Canada*, ³*Rotman Research Institute, Baycrest, Canada*
- [P103] **Behavioral responses to social defeat: A novel model for human psychiatric disorders?**
C.A. Luckett*¹, J.C. Ehlen², K.N. Paul², K.L. Huhman¹, ¹*Georgia State University, USA*, ²*Morehouse School of Medicine, USA*
- [P104] **Neural circuit mediating social stress-induced behavioral changes**
C.M. Markham*, S.L. Taylor, K.L. Huhman, *Georgia State University, USA*
- [P105] **Stress-induced dopamine release in relatives of schizophrenic patients**
A.A. Allman*¹, G.A. O'Driscoll¹², C. Benkelfat¹², A. Dagher², J. Pruessner¹², K.F. Casey¹, ¹*McGill University, Canada*, ²*Montreal Neurological Institute, Canada*
- [P106] **How the menstrual cycle modulates the effects of moderate psychological stress on the neural processing of biologically salient stimuli**
L. Ossewaarde*¹, E.J. Hermans¹, G.A. van Wingen¹, T. Bäckström², G. Fernández¹ ¹*Radboud University Nijmegen, The Netherlands*, ²*Umeå Neurosteroid Research Center, Sweden*
- [P107] **Time-of-day effects on behavioral response to novelty stress in the rat are task dependent**
C.M. Poveda, N. Popovic, P. Pozo, M.A. Rol, J.A. Madrid, M. Popovic*, *University of Murcia, Spain*
- [P108] **Moderate psychological stress reduces working memory related activity in the dorsolateral prefrontal cortex**
S. Qin*¹, E.J. Hermans¹, H.J.F. van Marle¹, J. Luo², G. Fernández¹, ¹*Radboud University Nijmegen, The Netherlands*, ²*Chinese Academy of Sciences (CAS), China*
- [P109] **Brain activation while witnessing a stressful event: A model-free functional MRI approach**
E.J. Hermans*¹, L. Ossewaarde¹, M.J.A.G. Henckens¹, Z. Pu^{2,1}, H.J.F. van Marle¹, S. Qin¹, ¹*Radboud University Nijmegen, The Netherlands*, ²*University of Amsterdam, The Netherlands*
- [P110] **Memory stressed: Acute stress effects on the neural correlates of memory formation**
M.J.A.G. Henckens*¹, E.J. Hermans¹, Z. Pu^{2,1}, M. Joëls², G. Fernández¹, ¹*Radboud University Nijmegen, The Netherlands*, ²*University of Amsterdam, The Netherlands*
- [P111] **Aging and time-of-day effects on anxiety in female *octodon degus***
N. Popovic*, B. Baño-Otálora, M.A. Rol, M. Caballero-Bleda, J.A. Madrid, M. Popovic, *University of Murcia, Spain*
- [P112] **The effects of positive emotion on human stress reactivity within the context of socio-evaluative threat**
T.E. Schramek*, M.F. Marin, L. Hashimi, S.J. Lupien, *Université de Montréal, Canada*
- [P113] **Moderate psychological stress alters amygdala reactivity to emotional facial expressions**
H.J.F. van Marle*, E.J. Hermans, S. Qin, G. Fernández, *Radboud University Nijmegen, The Netherlands*
- [P114] **Does social status influence biology in children? The influence of perceived socio-economic status on hpa stress response in children and adolescents**
J. Costa*, L. Stroud, *Brown University, USA*
- [P115] **Psychosocial stress influences cerebral ischemia outcome**
K. Karelina*, G.J. Norman, N. Zhang, J.S. Morris, H. Peng, A.C. DeVries, *Ohio State University, USA*
- [P116] **Psychosocial influences on neuropathic pain: Modulation of mechanical allodynia and depressive-like behavior**
G.J. Norman*, J.S. Morris, N. Zhang, K. Karelina, A.C. DeVries, *Ohio State University, USA*

