

ESI 中心理学及相关领域热点分析

——基于 2012 年 3 月更新数据

本期ESI (Essential Science Indicators) 发布精神病学/心理学领域的热点文章57篇, 神经科学与行为领域的热点文章63篇。

检索时间是2012年4月1-2日, 数据更新时间为2012年3月1日。

1、精神病/心理学领域热点论文的主题分析

该领域热点论文可总结为35个主题(详细信息见表1, 按总计被引次数排列)。

5-羟色胺在情绪中的角色问题在多期热点分析中都有出现, 本期中有两篇5-羟色胺转运体基因启动子区变异(5-HTTLPR)研究总共被引用了142次, 其中1篇文章关注5-HTTLPR与应激易感性的关系, 另外一篇则采用元分析的方法, 试图彰显5-HTTLPR对应激和抑郁情绪的影响。

有关抑郁情绪, 另有4篇热点论文入选。其中两篇探讨了抑郁的药物和经颅磁刺激治疗的方法, 其它两篇则为抑郁研究综述, 讨论的范围涉及抑郁的神经生物学基础、临床研究和认知特点等。

在每期热点分析报告中, 精神分裂症相关论文都会有数篇入选, 本期也不例外。其中有两篇文章论述了全基因组关联(GWAS)方法应用于精神分裂症研究所带来的理论变化和实践经验。有3篇文章形成另外一组精神分裂症的研究主题, 涉及对精神分裂症的重新思考和定义, 它们倾向于将精神分裂症定位于一种神经发育性疾病, 通过零星轻微的亚临床表现可以进行发育预测。此外, 有关精神分裂症的热点问题还包括MiRNA表达和抗精神病药物副作用等。

有关“适应”的问题中, 对环境的敏感性是重要的个体变量。有4篇相关论文入选本期热点文章, 其中3篇在目前实证数据的基础上各自提出了新的理论模型。另外1篇2010年发表在《Developmental psychology》上的文章则证明, 对应激的高敏感性促进个体更为适应还是更不适应主要取决于环境状况。

同样2010年发表在《Developmental psychology》上, 有1篇出现在多期热点分析中的文章, 综述了在调节基因外表型过程中, 基因和环境的相互依赖作用, 该文章到目前为止共被引用了57次。

热点论文中, 还有两篇综述文章重点关注了焦虑和抑郁病人表现出的注意力分配偏向。相对于中性刺激, 他们倾向于对负面信息和威胁分配更多的注意。在两篇综述中, 作者对形

成这种注意偏向的原因、表现、治疗方法和未来的研究方向都做了详明的阐述。

除了以上提到的若干领域,情绪调节、囤积症、自我控制、闯入性表象(**Intrusive images**)、儿童及青少年精神疾病等研究内容均进入本期 **ESI** 热点论文行列, 详细信息请见表 1。

表 1: 基于 ESI 2012 年 3 月更新的热点论文分析出的精神病学/心理学领域 35 个研究主题

综合后的研究主题	所含文章的详细信息			总计 被引 次数
	主题	题目	出处及原文或摘要链接	
5-羟色胺转运体基因启动子区变异 (5-HTTLPR) 的相关研究	5-HTTLPR 在应激易感性中的角色	Genetic sensitivity to the environment: the case of the serotonin transporter gene and its implications for studying complex diseases and traits	AMER J PSYCHIAT 167 (5): 509-527 MAY 2010 http://ajp.psychiatryonline.org/data/Journals/AJP/1823/appi.ajp.2010.09101452.pdf	142
	5-HTTLPR 调节应激与抑郁之间关系的元分析	The serotonin transporter promoter variant (5-httlpr), stress, and depression meta-analysis revisited evidence of genetic moderation	Arch Gen Psychiatry. 2011;68(5):444-454 http://archpsyc.ama-assn.org/cgi/content/abstract/68/5/444	
抑郁	两种抗抑郁药物组合治疗的效用要好于单独使用一种	Combination of antidepressant medications from treatment initiation for major depressive disorder: A double-blind randomized study	AMER J PSYCHIAT 167 (3): 281-288 MAR 2010 http://ajp.psychiatryonline.org/data/Journals/AJP/1821/appi.ajp.2009.09020186.pdf	115
	每天重复的左侧前额叶经颅磁刺激是治疗抑郁症的有效方法	Daily left prefrontal transcranial magnetic stimulation therapy for major depressive disorder a sham-controlled randomized trial	ARCH GEN PSYCHIAT 67 (5): 507-516 MAY 2010 http://archpsyc.ama-assn.org/cgi/content/full/67/5/507	

	综述: 回顾重症抑郁的神经生物学研究和临床研究	Linking molecules to mood: New insight into the biology of depression	AMER J PSYCHIAT 167 (11): 1305-1320 NOV 2010 http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3031089/	
	综述: 强调抑郁性认知 (depressive cognition) 的特点, 并提出应重视对抑郁性认知的了解和研究	Cognition and depression: current status and future directions	ANNU REV CLIN PSYCHOL 6: 285-312 2010 http://www.annualreviews.org/doi/full/10.1146/annurev.clinpsy.121208.131305?url_ver=Z39.88-2003&rfr_id=ori:rid:crossref.org&rfr_dat=cr_pub%3dpubmed&	
精神分裂症	建立了 MiRNA 的表达与精神分裂症的一系列关系	MicroRNA expression profiling in the prefrontal cortex of individuals affected with schizophrenia and bipolar disorders	SCHIZOPHR RES 124 (1-3): 183-191 DEC 2010 http://www.sciencedirect.com/science/article/pii/S0920996410013812	108
	综述: 针对精神分裂症的致病基因结构, 全基因组关联研究 (GWAS) 可以检验之前的假设, 并排除一些基因模型	Narrowing the boundaries of the genetic architecture of schizophrenia	SCHIZOPHRENIA BULL 36 (1): 14-23 JAN 2010 http://schizophreniabulletin.oxfordjournals.org/content/36/1/14.full	
	通过分析精分的拷贝数变异 (Copy number variants, CNVs) 获得对二者关系的确认, 以及基因变异的新证据	Copy number variants in schizophrenia: confirmation of five previous findings and new evidence for 3q29 microdeletions and vipr2 duplications	AMER J PSYCHIAT 168 (3): 302-316 MAR 2011 http://ajp.psychiatryonline.org/article.aspx?articleid=106776	
	将精神分裂症作为一种神经发育疾病 (neurodevelopmental disorder) 来重新	Rethinking schizophrenia	NATURE 468 (7321): 187-193 NOV 11 2010 http://www.nature.com/nature/journal/v468/n7321/f	

	思考		ull/nature09552.html	
	精神疾病是亚临床的精神病性表现的持续、进行性发展的自然结果	Evidence that onset of clinical psychosis is an outcome of progressively more persistent subclinical psychotic experiences: An 8-year cohort study	SCHIZOPHRENIA BULL 37 (1): 84-93 JAN 2011 http://schizophreniabulletin.oxfordjournals.org/content/37/1/84.long	
	一些零星维度 (dimensions) 的精神病外表型可能是严重心理病理学连续体的一部分	The structure of the extended psychosis phenotype in early adolescence: A cross-sample replication	SCHIZOPHRENIA BULL 37 (4): 850-860 JUL 2011 http://schizophreniabulletin.oxfordjournals.org/content/37/4/850.long	
	长期抗精神病药物治疗会对脑组织造成微小但是可测量到的缺损	Long-term antipsychotic treatment and brain volumes: A longitudinal study of first-episode schizophrenia	ARCH GEN PSYCHIAT 68 (2): 128-137 FEB 2011 http://psychoseanders.yolasite.com/resources/Beng-Soon.pdf	
	基于当前全基因组关联研究和基因突变研究的数据,提出一种混合模型来建立数据与理论间的一致性	Rethinking the genetic architecture of schizophrenia	PSYCHOL MED 41 (1): 19-32 JAN 2011 http://journals.cambridge.org/download.php?file=%2FPSM%2FPSM41_01%2F5003329171000070Xa.pdf&code=ccd14b537636e030d990e75cf703ee45	
特定的敏感性	对环境的高应激反应 (stress reactivity) 可以阻碍也可以促进适应机能	Biological sensitivity to context: The interactive effects of stress reactivity and family adversity on socioemotional behavior and school readiness	CHILD DEVELOP 81 (1): 270-289 JAN-FEB 2010 http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8624.2009.01394.x/pdf	69
	在环境适应领域提出了一种新的理论: 进化-神经发育理论	Differential susceptibility to the environment: An evolutionary-neurodevelopmental theory	DEV PSYCHOPATHOL 23 (1): 7-28 Sp. Iss. SI FEB 2011 http://journals.cambridge.org/action/displayFulltext?	

			type=1&fid=7978945&jid=DPP&volumeId=23&issueId=01&aid=7978943&bodyId=&membershipNumber=&societyETOCSession=	
	综述: 提出一种整合模型, 强调可以将脑看作在不断变化的环境和生物自我之间动态适应的界面(the brain as a dynamically adapting interface between the changing environment and the biological self)	Allostasis and the human brain: Integrating models of stress from the social and life sciences	PSYCHOL REV 117 (1): 134-174 JAN 2010 http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2808193/	
	综述: 跨学科的应变负荷模型 (allostatic load model)	A transdisciplinary perspective of chronic stress in relation to psychopathology throughout life span development	DEV PSYCHOPATHOL 23 (3): 725-776 Sp. Iss. SI AUG 2011 http://journals.cambridge.org/action/displayFulltext?type=1&fid=8328207&jid=DPP&volumeId=23&issueId=03&aid=8328205&bodyId=&membershipNumber=&societyETOCSession=	
基因与环境交互作用	综述: 在调节外表型过程中基因与环境的相互依赖作用	Epigenetics and the biological definition of gene x environment interactions	CHILD DEVELOP 81 (1): 41-79 JAN-FEB 2010 http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8624.2009.01381.x/pdf	57
焦虑个体对威胁性信息的注意偏向	综述: 注意偏向的机制	Mechanisms of attentional biases towards threat in anxiety disorders: An integrative review	CLIN PSYCHOL REV 30 (2): 203-216 MAR 2010 http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2814889/	51

	综述: 修正注意偏向的干预方法和机制	The modification of attentional bias to emotional information: A review of the techniques, mechanisms, and relevance to emotional disorders	COGN AFFECT BEHAV NEUROSCI 10 (1): 8-20 Sp. Iss. SI MAR 2010 http://www.ncbi.nlm.nih.gov/pubmed/20233952	
情绪调节	综述: 情绪以大脑中的动机环路为基础, 具有进化意义	Emotion and the motivational brain	BIOL PSYCHOL 84 (3): 437-450 Sp. Iss. SI JUL 2010 http://www.sciencedirect.com/science/article/pii/S0301051109002257	44
	综述: 回顾 P300 和 LPP 在情绪研究中的发现	Event-related potentials, emotion, and emotion regulation: An integrative review	DEVELOP NEUROPSYCHOL 35 (2): 129-155 2010 http://www.tandfonline.com/doi/pdf/10.1080/87565640903526504	
囤积症 (Hoarding)	从流行病学、现象学及神经生物学等角度综述强迫性囤积症 (Compulsive Hoarding) 的诊断标准	Refining the diagnostic boundaries of compulsive hoarding: A critical review	CLIN PSYCHOL REV 30 (4): 371-386 JUN 2010 http://www.childrenofhoarders.com/pdf/Pertusa%202010%20Hoarding%20Review.pdf	36
自我控制任务	考察自我损耗 (Ego depletion) 对自我控制任务 (Self-control task) 表现及结果的影响: 元分析	Ego depletion and the strength model of self-control: A meta-analysis	PSYCHOL BULL 136 (4): 495-525 JUL 2010 http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=4&hid=104&sid=9cf75d9f-537e-4374-8760-b635ee6ae23c%40sessionmgr111	32
心理疾病的闯入性表象	综述: 修正 PTSD 的双表征模型, 提出一种新的模型并讨论它的治疗意义	Intrusive images in psychological disorders: characteristics, neural mechanisms, and treatment implications	PSYCHOL REV 117 (1): 210-232 JAN 2010 http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2834572/	29

儿童及青少年心理障碍	美国青少年精神障碍的终生患病率: 来自美国全国青少年精神疾病流行病学调查 (National Comorbidity Survey Replication Adolescent Supplement, NCS-A) 的结果	Lifetime prevalence of mental disorders in U.S. adolescents: Results from the National Comorbidity Survey Replication-Adolescent Supplement (NCS-A)	J AMER ACAD CHILD ADOLESC PSY 49 (10): 980-989 OCT 2010 http://ac.els-cdn.com/S0890856710004764/1-s2.0-S0890856710004764-main.pdf?_tid=93f8128a89ca740697d4fee21ddb3006&acdnat=1336014970_f9d4af1fbf6dcebd059e9a4908a31586	22
老年痴呆症	血浆聚集素 (clusterin) 浓度与老年痴呆症的关系	Association of plasma clusterin concentration with severity, pathology, and progression in Alzheimer disease	ARCH GEN PSYCHIAT 67 (7): 739-748 JUL 2010 http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3111021/	22
ERP 波形研究	对 N400 作为一种 ERP 成分的特征、诱发条件、可能的意义等相关理论与研究进行综述	Thirty years and counting: finding meaning in the n400 component of the event-related brain potential (ERP)	ANNU REV PSYCHOL 62: 621-647 2011	18
	P300 研究	The anatomical and functional relationship between the p3 and autonomic components of the orienting response	PSYCHOPHYSIOLOGY 48 (2): 162-175 FEB 2011 http://www.tweelingenregister.org/2011/Nieuwenhuis_PP_2011.pdf	
所有权的早期发展	所有权与道德发展的紧密联系	Possession and morality in early development	NEW DIR CHILD ADOLES DEVELOP 132: 23-38 2011 http://events.psych.missouri.edu/pdfs-docs/Rochat4Feb10.pdf	18
	比较两种不同形式的所有权表征	Early representations of ownership	NEW DIR CHILD ADOLES DEVELOP 132: 39-51 2011 http://onlinelibrary.wiley.com/doi/10.1002/cd.295/abstract	

	物品所有权判断涉及物品历史的推断	Ownership and object history	NEW DIR CHILD ADOLES DEVELOP 132: 39-51 2011 http://onlinelibrary.wiley.com/doi/10.1002/cd.298/abstract	
ADHD 全基因组关联研究的元分析	虽然发现某些潜在基因与 ADHD 有关, 但并没有发现显著的全基因组关联	Meta-analysis of genome-wide association studies of attention-deficit/hyperactivity disorder	J AMER ACAD CHILD ADOLESC PSY 49 (9): 884-897 SEP 2010 http://www.psychobiologie.uni-wuerzburg.de/publications/pdf/Nealeetal2010Meta.pdf	17
时间知觉	综述: 时间间隔判断的主要发现	Timing and time perception: A review of recent behavioral and neuroscience findings and theoretical directions	ATTEN PERCEPT PSYCHOPHYS 72 (3): 561-582 APR 2010 http://www.iapsych.com/articles/grondon2012.pdf	17
内隐联接测试	元分析: 评价性条件反射	Evaluative conditioning in humans: A meta-analysis	PSYCHOL BULL 136 (3): 390-421 MAY 2010 http://users.ugent.be/~jdhouwer/ecmeta.pdf	16
视觉词汇识别	综述: 视觉词汇识别的空间编码模型	The spatial coding model of visual word identification	PSYCHOL REV 117 (3): 713-758 JUL 2010	16
参与负性情绪加工的中枢机制	综述内侧前额叶和前扣带回在负性情绪加工中的角色	Emotional processing in anterior cingulate and medial prefrontal cortex	TRENDS COGN SCI 15 (2): 85-93 FEB 2011 http://etkinlab.stanford.edu/Etkin%20Publications/Etkin,%20TICS%202011,%20emotional%20function%20of%20ACC%20and%20mPFC.pdf	15
强迫症	元分析: 发现了强迫性精神障碍与其他焦虑障碍共同而且独特的神经基础	Meta-analytical comparison of voxel-based morphometry studies in obsessive-compulsive disorder VS other anxiety disorders	ARCH GEN PSYCHIAT 67 (7): 701-711 JUL 2010 http://archpsyc.ama-assn.org/cgi/content/abstract/67/7/701	13

多巴胺与适应性记忆	综述:从生物学和心理学两个层面理解适应性记忆	Dopamine and adaptive memory	TRENDS COGN SCI 14 (10): 464-472 OCT 2010 http://www.sciencedirect.com/science/article/pii/S1364661310001865	13
社会经济地位与荷尔蒙分泌	低社会经济状况将导致长期的皮质醇产出,这可能可以解释低社会经济状况与心理和身体疾病的相关	How low socioeconomic status affects 2-year hormonal trajectories in children	PSYCHOL SCI 21 (1): 31-37 JAN 2010 http://www2.psych.ubc.ca/~healthpsych/Articles/Edith's%20articles/10%20Psy%20Sci%20SES%20cort.pdf	12
心理学教育讨论	强调专业心理学教育中应增加实习过程	The internship supply as a common-pool resource: a pathway to managing the imbalance problem	TRAIN EDUC PROF PSYCHOL 5 (3): 126-140 AUG 2011 http://www.apa.org/pubs/journals/features/tep-5-3-126.pdf	9
阿立哌唑 (aripiprazole)	评估阿立哌唑剂量、血糖水平、药理活性和临床效用之间的关系	A systematic review of aripiprazole-dose, plasma concentration, receptor occupancy, and response: implications for therapeutic drug monitoring	J CLIN PSYCHIAT 71 (11): 1447-1456 NOV 2010 http://www.ncbi.nlm.nih.gov/pubmed/20584524	8
积极的青春发展 (Positive Youth Development)	积极青春发展的 5Cs 模型(Competence, Confidence, Connection, Character, Caring)	The five CS model of positive youth development: a longitudinal analysis of confirmatory factor structure and measurement invariance	J YOUTH ADOLESCENCE 39 (7): 720-735 JUL 2010 http://www.national4-hheadquarters.gov/library/PYD-JYA_Bowers.pdf	8
疑病症	对疑病症进行 taxometric 分析,认为疑病症并不是一个具体的分类,而是多维结构的集合体 (dimensional entity)	A taxometric study of hypochondriasis symptoms	BEHAV THER 41 (4): 505-514 DEC 2010 http://www.sciencedirect.com/science/article/pii/S0005789410000717	8

选择性血清素再吸收抑制剂与异常出血	选择性血清素再吸收抑制剂 (SSRI) 导致的胃酸分泌过多, 可能是肠胃系统出血的原因	Serotonin reuptake inhibitor antidepressants and abnormal bleeding: a review for clinicians and a reconsideration of mechanisms	J CLIN PSYCHIAT 71 (12): 1565-1575 DEC 2010 http://www.ncbi.nlm.nih.gov/pubmed/21190637	7
信息源差异	强调儿童评估 (child assessment) 研究中信息源差异的鲁棒性 (robustness)	Probing the depths of informant discrepancies: contextual influences on divergence and convergence	J CLIN CHILD ADOLESC PSYCHOL 40 (1): 54-66 2011 http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3026587/	6
走神阅读的眼动研究	在走神阅读中缺少正常阅读中指导眼球运动的认知活动	Eye movements during mindless reading	PSYCHOL SCI 21 (9): 1300-1310 SEP 2010 http://pss.sagepub.com/content/early/2010/07/27/0956797610378686.full.pdf+html	6
婴儿模仿学习	支持儿童模仿学习的两阶段理论, 并强调运动反响 (motor resonance) 在儿童模仿学习中必要但不充分的作用	Bridging the gap between the other and me: the functional role of motor resonance and action effects in infants' imitation	DEV SCI 14 (4): 901-910 JUL 2011 http://onlinelibrary.wiley.com/doi/10.1111/j.1467-7687.2011.01040.x/pdf	5
积极心理学	综述: 积极心理学的社会认知观点	A social cognitive perspective on positive psychology	REV PSICOL SOC 26 (1): 7-20 JAN 2011 http://chinesesites.library.ingentaconnect.com/content/fias/r dps/2011/00000026/00000001/art00002?token=004c114797e2a46762c6b415d3e766c252c495b5f78673f7b2f267738703375686f49a939e39	4

意识	综述: 为意识研究的高阶理论 (high-order theory) 做辩护	Empirical support for higher-order theories of conscious awareness	TRENDS COGN SCI 15 (8): 365-373 AUG 2011 http://www.cell.com/trends/cognitive-sciences/abstract/S1364-6613(11)00105-7	4
脑损伤	指出目前轻微脑外伤治疗中的一些问题	Blast-induced mild traumatic brain injury	PSYCHIAT CLIN N AMER 33 (4): 757-+ DEC 2010 http://www.ncbi.nlm.nih.gov/pubmed/21093677	4
催产素的社会效应	在原有文献基础上提出催产素的社会效应受到情景特征和/或个体特征的交互影响	Social effects of oxytocin in humans: Context and person matter	TRENDS COGN SCI 15 (7): 301-309 JUL 2011 http://www.sciencedirect.com/science/article/pii/S1364661311000830	3
儿童虐待干预研究	心理社会干预将可以改善受虐儿童的生物调节过程	Normalizing the development of cortisol regulation in maltreated infants through preventive interventions	DEV PSYCHOPATHOL 23 (3): 789-800 Sp. Iss. SI AUG 2011 http://journals.cambridge.org/action/displayFulltext?type=6&fid=8328212&jid=DPP&volumeId=23&issueId=03&aid=8328211&bodyId=&membershipNumber=&societyETOCSession=&fulltextType=RA&fileId=S0954579411000307	3

2、神经科学与行为领域热点论文的主题分析

该领域热点论文可总结为31个主题（详细信息见表2，按总计被引次数排列）。

总体来看，各类神经系统疾病依然是领域内的研究热点。有11篇文章都涉及TDP-43（TAR DNA-binding protein 43）与肌萎缩侧索硬化（Amyotrophic lateral sclerosis, ALS）和/或额颞叶失智症（Frontotemporal Lobar Degeneration, FTL D）的关系，因而共同集合成为本期热点分析中包含文章最多的一个研究领域。这些研究都旨在弄清楚肌萎缩侧索硬化和额颞叶失智症的致病原因，而其原因则多与TDP-43磷酸化和相关生物过程有关。

另外一个包含文章较多的研究领域涉及帕金森氏病。发表在Nature上的研究论文强调通过调节基底神经节的直接通路来改善帕金森氏病运动障碍，有关此运动障碍与多巴胺替代治疗的关系的临床调查由宾夕法尼亚大学医学院（University of Pennsylvania School of Medicine）完成，并发表在2010年的Archives of Neurology上，也入选热点论文。另外两篇帕金森氏病研究分别关于突触核蛋白水平和动物模型。

作为一种普通公众也不陌生的脑部疾病——癫痫，国际抗癫痫联盟委员会（ILAE）有关它定义、概念和相关术语的两篇文章继上期入选热点论文后，本期依旧保持其持续的热度，总计被引195次。ILAE（2005-2009任期）发布修订后的癫痫术语、概念及该联盟的专项工作组针对耐药性癫痫制定的定义。

在有关多发性硬化症（MS）的研究中，当前的热点集中在MS病人脑静脉的临床表现，有三篇热点文章都指向同一个观点：MS病人并不存在之前认为的脑静脉慢性功能不全的问题。MS的另外一篇热点论文是关于其麦当劳诊断准则（McDonald Criteria）的，国际MS诊断组在爱尔兰都柏林举行会议，讨论了麦当劳准则的应用状况，对之前使用的诊断标准做了修订，发表在Annals of Neurology上。除此以外，新发现的25羟维生素D水平与多发性硬化症复发之间的关联也成为科学家们热烈讨论的议题之一。

热点文章中，有4篇关于阿尔茨海默症的研究均涉及 β -淀粉样蛋白沉积致阿尔茨海默症的，而且这些文章发表在Nature、Neuron、Science等顶级学术刊物上，这无疑说明 β -淀粉样蛋白研究是阿尔茨海默症研究中绝对的热点，众多研究者寄希望于这项发现可以帮助人类提早攻克阿尔茨海默症。

此外，睡眠与记忆、慢性偏头痛、有翁旭初老师参与的静息状态下的脑功能联接研究、海马功能、精神分裂症、小胶质细胞、中风、病理性疼痛等多个领域的论文也进入本期ESI热点行列，详细信息请见表2。

表 2: 基于 ESI 2012 年 3 月更新的热点论文分析出的神经科学与行为领域 31 个研究主题

综合后的研究主题	所含文章的详细信息			总计被引次数
	主题	题目	出处及原文或摘要链接	
肌萎缩侧索硬化 (ALS)、额颞叶失智症 (FTLD) 与 TDP-43	≈ 25-kDa TDP-43 的 c 端片段与 ALS 和 FTLD 的发生发展相关	TDP-43 transgenic mice develop spastic paralysis and neuronal inclusions characteristic of ALS and frontotemporal lobar degeneration	PROC NAT ACAD SCI USA 107 (8): 3858-3863 FEB 23 2010 http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2840518/	375
	TDP-43 的野生型 (wild-type) 导致 TDP-43 的磷酸化、线粒体聚集、运动缺陷和过早死亡	Wild-type human TDP-43 expression causes TDP-43 phosphorylation, mitochondrial aggregation, motor deficits, and early mortality in transgenic mice	J NEUROSCI 30 (32): 10851-10859 AUG 11 2010 http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3056148/	
	受 TDP-43 影响的前体信使 RNA 和 rRNA 导致神经元易损	Long pre-mRNA depletion and rRNA missplicing contribute to neuronal vulnerability from loss of TDP-43	NAT NEUROSCI 14 (4): 459-U92 APR 2011 http://www.nature.com/neuro/journal/v14/n4/full/nn.2779.html	
	TDP-43 在体内倾向于与含有长的富含 UG 的序列结合。相当数量受 TDP-43 调控的可变 mRNA 亚型可以编码蛋白, 这些蛋白与神经发育的调控或神经疾病相关	Characterizing the RNA targets and position-dependent splicing regulation by TDP-43	NAT NEUROSCI 14 (4): 452-U180 APR 2011 http://www.nature.com/neuro/journal/v14/n4/full/nn.2778.html	

类似 FTLD, 慢性创伤性脑部病变与 TDP-43 有关并导致运动神经元疾病	TDP-43 proteinopathy and motor neuron disease in chronic traumatic encephalopathy	J NEUROPATHOL EXP NEUROL 69 (9): 918-929 SEP 2010 http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2951281/
用转基因大鼠模拟 ALS 等疾病的行为、病理学和生物化学特征	Pathological hallmarks of amyotrophic lateral sclerosis/frontotemporal lobar degeneration in transgenic mice produced with TDP-43 genomic fragments	BRAIN 134: 2610-2626 Part 9 SEP 2011 http://brain.oxfordjournals.org/content/134/9/2610.long
分拣蛋白中介的 PGRN (Progranulin) 胞吞作用在 FTLD 的病理生理过程中扮演核心作用	Sortilin-mediated endocytosis determines levels of the frontotemporal dementia protein, progranulin	NEURON 68 (4): 654-667 NOV 18 2010 http://ac.els-cdn.com/S0896627310007762/1-s2.0-S0896627310007762-main.pdf?_tid=4be1116f344a4d40545e30917adecaeaf&acdnat=1335185912_c56c188a65c02310adcc85a8e8046491
OPTN 基因突变在 ALS 发病中的作用	Mutations of optineurin in amyotrophic lateral sclerosis	NATURE 465 (7295): 223-226 MAY 13 2010 http://www.nature.com/nature/journal/v465/n7295/pdf/nature08971.pdf
FUS 免疫反应性包涵体是散发型和非 SOD1 突变的家族性 ALS 的一个常见特征	FUS-immunoreactive inclusions are a common feature in sporadic and non-SOD1 familial amyotrophic lateral sclerosis	ANN NEUROL 67 (6): 739-748 JUN 2010 http://onlinelibrary.wiley.com/doi/10.1002/ana.22051/pdf
利用外显子组测序 (Exome	Exome sequencing reveals VCP mutations as a cause	NEURON 68 (5): 857-864 DEC 9 2010

	Sequencing)发现 VCP 突变是家族性 ALS 的发病原因之一	of familial ALS	http://download.cell.com/neuron/pdf/PIIS0896627310009785.pdf?intermediate=true	
	ALS 的病因可能是 Ubiquilin-2 无法正常执行其功能而引起运动神经元凋亡	Mutations in UBQLN2 cause dominant X-linked juvenile and adult-onset ALS and ALS/dementia	NATURE 477 (7363): 211-U113 SEP 8 2011 http://www.nature.com/nature/journal/v477/n7363/full/nature10353.html	
帕金森氏病 (Parkinson's disease, PD)	PD 发生冲动控制障碍 (Impulse control disorder) 的点流行率 (point prevalence) 及其与多巴胺替代疗法等临床指标间的联系: 大规模流行病学调查	Impulse control disorders in Parkinson disease a cross-sectional study of 3090 patients	ARCH NEUROL. 2010 May;67(5):589-95 http://archneur.jamanetwork.com/article.aspx?doi=10.1001/archneurol.2010.65	237
	通过调节基底神经节的直接通路可以有效改善 PD 的运动缺陷	Regulation of parkinsonian motor behaviours by opto genetic control of basal ganglia circuitry	NATURE 466 (7306): 622-U7 JUL 29 2010 http://www.nature.com/nature/journal/v466/n7306/full/nature09159.html	
	突触核蛋白水平的提高导致 PD 相关临床症状的神经生物学机制	Increased expression of alpha-synuclein reduces neurotransmitter release by inhibiting synaptic vesicle recluster after endocytosis	NEURON 65 (1): 66-79 JAN 14 2010 http://www.sciencedirect.com/science/article/pii/S0896627309010411	
	综述: PD 的动物模型及其与人类疾病的比较	Genetic animal models of Parkinson's disease	NEURON 66 (5): 646-661 JUN 10 2010 http://jnnp.bmj.com/content/82/4/358.full.pdf	

癫痫	耐药性癫痫 (Drug resistant epilepsy) 的定义: ILAE 专项工作组做出一致结论	Definition of drug resistant epilepsy: consensus proposal by the ad hoc task force of the ILAE commission on therapeutic strategies	EPILEPSIA 51 (6): 1069-1077 JUN 2010 http://onlinelibrary.wiley.com/doi/10.1111/j.1528-1167.2009.02397.x/pdf	195
	癫痫概念与术语修正	Revised terminology and concepts for organization of seizures and epilepsies: report of the ILAE commission on classification and terminology, 2005-2009	EPILEPSIA 51 (4): 676-685 APR 2010 http://onlinelibrary.wiley.com/doi/10.1111/j.1528-1167.2010.02522.x/full	
多发性硬化症 (Multiple sclerosis, MS)	MS 病人没有脑静脉阻塞	No cerebrocervical venous congestion in patients with multiple sclerosis	ANN NEUROL 68 (2): 173-183 AUG 2010 http://onlinelibrary.wiley.com/doi/10.1002/ana.22085/pdf	151
	MS 诊断标准: 麦当劳准则 (McDonald Criteria) 2010 年修正版	Diagnostic criteria for multiple sclerosis: 2010 revisions to the McDonald criteria	ANN NEUROL 69 (2): 292-302 FEB 2011 http://onlinelibrary.wiley.com/doi/10.1002/ana.2366/pdf	
	对 MS 存在慢性脑静脉功能不全提出质疑	The perfect crime? CCSVI not leaving a trace in MS	J NEUROL NEUROSURG PSYCHIAT 82 (4): 436-440 APR 2011 http://jnnp.bmj.com/content/82/4/436.long	
	异常脑静脉引流与 MS 没有关系	No association of abnormal cranial venous drainage with multiple sclerosis: a magnetic resonance venography and flow-quantification study	J NEUROL NEUROSURG PSYCHIAT 82 (4): 429-435 APR 2011 http://www.tara.tcd.ie/jspui/bitstream/2262/55161/1/PEER_stage2_10.1136%252Fjnnp.2010.223479.pdf	
	25 羟维生素 D 水平与 MS 复发	Higher 25-hydroxyvitamin D is associated with lower relapse risk in multiple sclerosis	ANN NEUROL 68 (2): 193-203 AUG 2010 http://onlinelibrary.wiley.com/doi/10.1002/ana.2	

	风险		2043/full	
阿尔茨海默症 (Alzheimer's Disease, AD)	对 AD 的两种标记性蛋白—— β -淀粉样蛋白和 Tau 蛋白之间关系的综述	Amyloid-beta and tau - a toxic pas de deux in Alzheimer's disease	NAT REV NEUROSCI 12 (2): 67-72 FEB 2011 http://www.nature.com/nrn/journal/v12/n2/pdf/nrn2967.pdf	110
	老年痴呆症脑区神经元通讯增多导致更多 β -淀粉样蛋白沉积	Neuronal activity regulates the regional vulnerability to amyloid-beta deposition	NAT NEUROSCI 14 (6): 750-U353 JUN 2011 http://www.nature.com/neuro/journal/v14/n6/full/nn.2801.html	
	调节伽玛分泌酶能减少 β -淀粉样蛋白沉积	Modulation of gamma-secretase reduces beta-amyloid deposition in a transgenic mouse model of Alzheimer's disease	NEURON 67 (5): 769-780 SEP 9 2010 http://www.sciencedirect.com/science/article/pii/S0896627310006288	
	β -淀粉样蛋白清除率降低是造成老年痴呆症的原因	Decreased clearance of CNS beta-amyloid in Alzheimer's disease	SCIENCE 330 (6012): 1774-1774 DEC 23 2010 http://www.sciencemag.org/content/330/6012/1774.full	
睡眠与记忆	综述: 睡眠对记忆的巩固功能	The memory function of sleep	NAT REV NEUROSCI 11 (2): 114-126 FEB 2010 http://fisiologiafabc.com.br/Diekemann%20and%20Born%202010%20-%20nature%20reviews%20neuroscience.pdf	106
胶质细胞	从生物学和病理学角度综述星	Astrocytes: biology and pathology	ACTA NEUROPATHOL 119 (1): 7-35 JAN 2010	96

	形胶质细胞在中枢神经系统中的角色		http://www.springerlink.com/content/yt3g342215343602/fulltext.pdf	
慢性偏头痛	肉毒杆菌毒素 A 用于治疗慢性偏头痛的临床实验 1	Onabotulinumtoxina for treatment of chronic migraine: results from the double-blind, randomized, placebo-controlled phase of the preempt 2 trial	CEPHALALGIA 30 (7): 804-814 JUL 2010 http://cep.sagepub.com/content/30/7/804.long	92
	肉毒杆菌毒素 A 用于治疗慢性偏头痛的临床实验 2	Onabotulinumtoxina for treatment of chronic migraine: results from the double-blind, randomized, placebo-controlled phase of the preempt 1 trial	CEPHALALGIA 30 (7): 793-803 JUL 2010 http://cep.sagepub.com/content/30/7/793.long	
静息状态下的脑功能联接	收集了来自 35 个中心 1414 名健康成年志愿者的高清晰度静息 fMRI 扫描图, 发现人大脑中存在一个统一的功能架构	Toward discovery science of human brain function	PROC NAT ACAD SCI USA 107 (10): 4734-4739 MAR 9 2010 http://www.pnas.org/content/107/10/4734.full.pdf+html	89
海马功能	从行为、解剖和基因表达等层面对海马背侧、腹侧以及中间三部分的功能进行综述	Are the dorsal and ventral hippocampus functionally distinct structures?	NEURON 65 (1): 7-19 JAN 14 2010 http://www.sciencedirect.com/science/article/pii/S0896627309009477	77
精神分裂症	对精神分裂症中异常的神经元震荡与同步化现象进行综述	Abnormal neural oscillations and synchrony in schizophrenia	NAT REV NEUROSCI 11 (2): 100-113 FEB 2010 http://www.nature.com/nrn/journal/v11/n2/full/nrn2774.html	74

小胶质细胞	研究揭示小胶质细胞的起源不同于巨噬细胞，其祖细胞发生于胚胎早期	Fate mapping analysis reveals that adult microglia derive from primitive macrophages	SCIENCE 330 (6005): 841-845 NOV 5 2010 http://www.sciencemag.org/content/330/6005/841.long	59
	抑制半胱天冬酶的活性来控制小胶质细胞的过度活化和毒性	Caspase signalling controls microglia activation and neurotoxicity	NATURE 472 (7343): 319-U214 APR 21 2011 http://www.nature.com/nature/journal/v472/n7343/full/nature09788.html	
神经精神障碍 (Neuropsychiatric disorder) 的动物模型	对包括精神分裂症、抑郁和双相障碍在内的神经精神障碍的动物模型进行综述	Animal models of neuropsychiatric disorders	NAT NEUROSCI 13 (10): 1161-1169 OCT 2010 http://www.if-pan.krakow.pl/ifpan_ww/tl_files/institut/artikul2.pdf	55
有氧运动对轻度认知障碍的积极作用	高强度有氧训练改善执行机能等认知任务的表现与生理指标，并且干预效果有性别差异	Effects of aerobic exercise on mild cognitive impairment a controlled trial	ARCH NEUROL 67 (1): 71-79 JAN 2010 http://archneur.ama-assn.org/cgi/reprint/67/1/71	51
中风	综述：中风治疗方法	The science of stroke: mechanisms in search of treatments	NEURON 67 (2): 181-198 JUL 29 2010 http://www.sciencedirect.com/science/article/pii/S0896627310005404	48
皮层神经元环路的异步活动	周期性的神经网络可以产生异步活动，意味着来自周围神经元相同的输入会导致不同的结果	The asynchronous state in cortical circuits	SCIENCE 327 (5965): 587-590 JAN 29 2010 http://www.sciencemag.org/content/327/5965/587.full	44
神经病理性疼痛	药物治疗神经病理性疼痛的元分析	The evidence for pharmacological treatment of neuropathic pain	PAIN 150 (3): 573-581 SEP 2010 http://www.sciencedirect.com/science/article/pii/S0304395910003817	44

5-羟色胺 (5-HTT)	L-dopa 治疗导致 5-羟色胺突触终端快速生长	Maladaptive plasticity of serotonin axon terminals in levodopa-induced dyskinesia	ANN NEUROL 68 (5): 619-628 NOV 2010 http://onlinelibrary.wiley.com/doi/10.1002/ana.22097/pdf	43
	综述: 回顾有关 5-HTT 基因启动因子多态性区域的有关研究, 重新认识 5-HTT 功能的等位基因变异	Looking on the bright side of serotonin transporter gene variation	BIOL PSYCHIAT 69 (6): 513-519 MAR 15 2011 http://www.sciencedirect.com/science/article/pii/S0006322310009893	
	揭示了胎盘新陈代谢通路在塑造婴儿大脑发育中的新的直接作用, 研究者认为母体-胎盘-婴儿交互作用是 5-HT 持续影响心理健康的基础	A transient placental source of serotonin for the fetal forebrain	NATURE 472 (7343): 347-U246 APR 21 2011 http://www.nature.com/nature/journal/v472/n7343/full/nature09972.html	
内源性大麻素系统	慢性单酰基甘油脂肪酶 (MAGL) 导致对大麻素受体 1 (CB1 受体) 的交叉抗药性与生理依赖	Chronic monoacylglycerol lipase blockade causes functional antagonism of the endocannabinoid system	NAT NEUROSCI 13 (9): 1113-U111 SEP 2010 http://www.nature.com/neuro/journal/v13/n9/abs/nn.2616.html	41
氨己烯酸治疗 (Vigabatrin)	综述: 欧洲的实验表明, 氨己烯酸作为复杂部分性癫痫的辅助治	Vigabatrin therapy for refractory complex partial seizures: review of major European trials	ACTA NEUROL SCAND 124: 16-28 Sp. Iss. SI Suppl. 192 DEC 2011 http://onlinelibrary.wiley.com/doi/10.1111/j.1600	41

therapy) 与复杂部分性癫痫发作 (complex partial seizures)	疗手段是有效的。		-0404.2011.01597.x/pdf
	综述: 氨己烯酸治疗婴儿性痉挛	Vigabatrin therapy for infantile spasms: review of major trials in Europe, Canada, and the United States; and recommendations for dosing	VIGABATRIN THERAPY; MAJOR EUROPEAN TRIALS; INFANTILE SPASMS; MAJOR TRIALS; REVIEW http://onlinelibrary.wiley.com/doi/10.1111/j.1600-0404.2011.01599.x/pdf
	综述: 双侧视野缩小并不仅仅发生在接受了氨己烯酸治疗的患者中, 在 vigabatrin-naïve 的癫痫患者中也偶见	Understanding and interpreting vision safety issues with vigabatrin therapy	ACTA NEUROL SCAND 124: 57-71 Sp. Iss. SI Suppl. 192 DEC 2011 http://onlinelibrary.wiley.com/doi/10.1111/j.1600-0404.2011.01601.x/pdf
	接受氨己烯酸治疗的患者进行核磁扫描会观察到一些不正常的脑部改变	Non-vision adverse events with vigabatrin therapy	ACTA NEUROL SCAND 124: 72-82 Sp. Iss. SI Suppl. 192 DEC 2011 http://onlinelibrary.wiley.com/doi/10.1111/j.1600-0404.2011.01602.x/pdf
	综述: 氨己烯酸作用机制	Mechanism of action of vigabatrin: correcting misperceptions	ACTA NEUROL SCAND 124: 5-15 Sp. Iss. SI Suppl. 192 DEC 2011 http://onlinelibrary.wiley.com/doi/10.1111/j.1600-0404.2011.01596.x/pdf
	对接受氨己烯酸治疗的患者所遭受的视觉损伤进行视野测试	Primer on visual field testing, electroretinography, and other visual assessments for patients treated with vigabatrin	ACTA NEUROL SCAND 124: 48-56 Sp. Iss. SI Suppl. 192 DEC 2011 http://www.ncbi.nlm.nih.gov/pubmed/22061180

	和视网膜电图描记评估 (electroretinography)			
促代谢型谷氨酸受体 (mGluRs)	综述: mGluRs 介导的长时程抑制及其对行为、学习和记忆的可塑性的影响	Group 1 mGluR-dependent synaptic long-term depression: Mechanisms and implications for circuitry and disease	NEURON 65 (4): 445-459 FEB 25 2010 http://www.sciencedirect.com/science/article/pii/S0896627310000413	38
自闭症系列障碍 (Autism spectrum disorder, ASD)	利用基因删除 (gene deletions) 方法, 发现 Shank3 突变小鼠表现出自闭样行为及纹状体功能障碍	Shank3 mutant mice display autistic-like behaviours and striatal dysfunction	NATURE 472 (7344): 437-442 APR 28 2011 http://www.nature.com/nature/journal/v472/n7344/pdf/nature09965.pdf	32
	利用全基因组分析 (Genome-wide analysis), 发现 ASD 与 7q11.23 区段的重复复制 (Denovo duplication) 显著相关, 而后者的部分缺损可导致威廉姆斯综合征 (Williams syndrome)	Multiple recurrent de novo cnvs, including duplications of the 7q11.23 Williams syndrome region, are strongly associated with autism	NEURON 70 (5): 863-885 JUN 9 2011 http://www.feingold.org/Research/PDFstudies/Sanders2011.pdf	
奖赏与厌恶	关于多巴胺在奖赏以及厌恶等	Dopamine in motivational control: rewarding, aversive, and alerting	NEURON 68 (5): 815-834 DEC 9 2010	31

	非奖赏事件中所起作用的综述		http://lsr-web.net/Assets/NEIPages/OkihideHikosaka/pdfs/BrombergMartinMatsumotoOHNeuronReview2010.pdf	
原发性进行性失语症 (Primary progressive aphasia, PPA)	PPA 分类及其 3 种主要变体	Classification of primary progressive aphasia and its variants	NEUROLOGY 76 (11): 1006-1014 MAR 2011 http://www.neurology.org/content/76/11/1006.abstract?sid=f1072b3b-1668-4391-b444-ecb2b71e5a1	27
成人神经发生 (neurogenesis)	提高小鼠成年后生成的神经元的存活率的实验表明, 成年海马神经发生的增加与特定认知功能的增强之间有因果关系。焦虑症和记忆受损也许可以通过刺激成年海马神经生成来治疗。	Increasing adult hippocampal neurogenesis is sufficient to improve pattern separation	NATURE 472 (7344): 466-U539 APR 28 2011 http://www.nature.com/nature/journal/v472/n7344/full/nature09817.html	24
	综述: 神经发生的研究成果和展望	Adult neurogenesis in the mammalian brain: Significant answers and significant questions	NEURON 70 (4): 687-702 MAY 26 2011 http://www.culturacientifica.org/textosudc/neurogenesis/adult_neurogenesis.pdf	
由纤维母细胞生成神经元	确定了由纤维母细胞不经过祖细胞阶段直接生成多巴胺能神	Direct generation of functional dopaminergic neurons from mouse and human fibroblasts	NATURE 476 (7359): 224-U151 AUG 11 2011 http://www.boar.or.kr/board_upload/1311397953.pdf	23

	经细胞的转录因子			
	表明了 miR-9/9*-124 相关的遗传网络在基因命运决定中的作用	Microrna-mediated conversion of human fibroblasts to neurons	NATURE 476 (7359): 228-U123 AUG 11 2011 http://www-biology.ucsd.edu/classes/bggn231.FA11/documents/2P1Yooetal.pdf	
多种神经疾病患者与健康人群的慢性脑脊髓静脉功能不足 (Chronic cerebrospinal venous insufficiency, CCSVI)	运用彩色多普勒诊断标准, 考察多发性硬化症、临床孤立综合征 (Clinically isolated syndrome)、其它类型神经疾病以及健康对照组的慢性脑脊髓静脉功能不足 (CCSVI) 的流行程度	Prevalence, sensitivity, and specificity of chronic cerebrospinal venous insufficiency in MS	NEUROLOGY 77 (2): 138-144 JUL 2011 http://knowledge.translation.ca/sysrev/articles/project44/CCSVI%20%20Zivadinov%20et%20al.pdf	15
杏仁核与焦虑	侧杏仁核(basolateral amygdala)到中央核杏仁体 (central nucleus of the amygdala) 的投射通路是与焦虑行为最为相关的关键环路	Amygdala circuitry mediating reversible and bidirectional control of anxiety	NATURE 471 (7338): 358-362 MAR 17 2011 http://www.nature.com/nature/journal/v471/n7338/full/nature09820.html	13

<p>激活与抑制的细胞平衡(cellular balance of excitation and inhibition)</p>	<p>提高 (elevated) 细胞的激活与抑制之间的平衡, 导致信息加工损伤和特殊的行为缺陷的产生</p>	<p>Neocortical excitation/inhibition balance in information processing and social dysfunction</p>	<p>NATURE 477 (7363): 171-178 SEP 8 2011 http://www.nature.com/nature/journal/v477/n7363/full/nature10360.html</p>	<p>7</p>
<p>纹状体</p>	<p>综述: 多巴胺调节纹状体投射通路, 进而影响动作选择</p>	<p>Modulation of striatal projection systems by dopamine</p>	<p>ANNU REV NEUROSCI 34: 441-466 2011 http://www.annualreviews.org/doi/pdf/10.1146/annurev-neuro-061010-113641</p>	<p>6</p>