

Terrence Christopher Town, Ph.D.

PERSONAL HISTORY Business address:

Faculty Research Scientist II
Cedars-Sinai Medical Center
Departments of Neurosurgery, Biomedical Sciences, and Medicine
Maxine Dunitz Neurosurgical Institute
Davis Bldg., Rms. 2094 (lab) and 2091 (office)
8700 Beverly Blvd., Los Angeles, CA 90048
Tel: (310) 423-1202; Email: terrence.town@cshs.org

EDUCATION

2002 – 2006 Yale University/Howard Hughes Medical Institute, New Haven, CT
NIH/NRSA/NIA Post-Doctoral Fellow, Department of Immunobiology
1998 – 2002 University of South Florida, Tampa, FL
Awarded Ph.D. in Medical Sciences/Neuroscience with Distinction
Dissertation title: “The CD40/CD40L receptor/ligand dyad: role in the pathogenesis of
Alzheimer’s disease”; G.P.A., 4.0
1992 – 1996 University of South Florida, Tampa, FL
Awarded Bachelor of Arts degree in Psychology; G.P.A., 4.0

PROFESSIONAL EXPERIENCE

2007 – Faculty Research Scientist II
Cedars-Sinai Medical Center, Los Angeles, CA
Departments of Neurosurgery, Biomedical Sciences, and Medicine
Maxine Dunitz Neurosurgical Institute
2006 – 2007 Associate Research Scientist
Yale University School of Medicine and
Howard Hughes Medical Institute, New Haven, CT
Department of Immunobiology

PROFESSIONAL ACTIVITIES

- 2008 – Service on the Cedars-Sinai “Graduate Program in Biomedical Sciences and Translational Medicine” admissions committee
- 2008 – External thesis committee member for Kavon Rezai-zadeh, Ph.D. Candidate, Department of Psychiatry and Behavioral Medicine, University of South Florida
- 2007 – Inflammogenesis (USA, *editorial board member*)
- 2007 – Journal of Neuroscience (USA, *ad hoc reviewer*)
- 2007 – Brain Research (USA, *ad hoc reviewer*)
- 2007 – Technology Foundation STW (The Netherlands, *ad hoc reviewer*)
- 2007 – Neurobiology of Disease (USA, *ad hoc reviewer*)
- 2006 – Journal of Epidemiology and Community Health (USA, *ad hoc reviewer*)
- 2006 – Neurobiology of Aging (USA, *ad hoc reviewer*)
- 2006 – Experimental Gerontology (USA, *ad hoc reviewer*)
- 2006 – Expert Opinion (UK, *ad hoc reviewer*)
- 2006 – Telethon Foundation (Italy, *ad hoc reviewer*)
- 2006 – Journal of Neuroinflammation (USA, *ad hoc reviewer*)
- 2005 – Neuropathology and Applied Neurobiology (UK, *ad hoc reviewer*)
- 2005 – Journal of Pharmacology and Experimental Therapeutics (USA, *ad hoc reviewer*)
- 2005 – Health Research Board (UK, *ad hoc reviewer*)
- 2005 – Vaccine (UK, *ad hoc reviewer*)
- 2003 – New York Academy of Science (member)
- 2001 – Neuroscience Letters (USA, *ad hoc reviewer*)
- 2001 – Neuropsychiatric Genetics (USA, *ad hoc reviewer*)
- 1999 – Society for Neuroscience (member)
- 1999 – American Association for the Advancement of Science (member)

HONORS AND SPECIAL AWARDS

- 2002 Listed in Marquis Who’s Who in Medicine and Healthcare 2002-2003
- 2002 Awarded Travel Fellowship for the 8th International Conference on Alzheimer’s disease and Related Disorders
- 2002 Recognized as outstanding mentor of a 2001 Siemens Westinghouse Science & Technology Competition Regional Finalist
- 2001 Awarded Society for Neuroscience Eli Lilly Travel Fellowship
- 2001 Awarded American Association of Medical Science Graduate Students Research Excellence Award
- 2000 Awarded Outstanding Student Award, Suncoast Biomolecular Science Conference
- 2000 Awarded American Association of Medical Science Graduate Students Research Excellence Award
- 1999 Awarded Stewart Fellowship in Neuroscience
- 1998 Awarded Graduate Assistantship in Neuroscience, University of South Florida
- 1996 Awarded King/O’Neal Scholar (valedictorian), University of South Florida

RESEARCH GRANTS AND FELLOWSHIPS RECEIVED

- 2008 – 2011 *Principal Investigator*, “Blocking TGF-beta immune signaling as a therapeutic target for Alzheimer’s disease”, second part of the K99/R00 “Pathway to Independence” award 4R00 AG029726-02 from NIH/NIA, \$750,000 over 3 years: 04/01/08-03/31/11
- 2005 – 2010 *Co-Investigator*, “Toll-like Receptor Responsiveness in the Elderly and Immunosuppressed”, NIH Contract HHSN266200500031C from NIH/NIAID (Fikrig, PI), \$7,000,000 over 5 years: 9/30/05-9/29/10
- 2005 – 2008 *Principal Investigator*, “An Inducible Mouse to Elucidate the Role of Immunity/ Inflammation in Alzheimer’s Disease”, Alzheimer’s Association Investigator-Initiated Research Grant IIRG-05-14993 (Flavell, PI from 10/01/05-9/30/07; Town, PI from 10/01/07-9/30/08), \$250,000 over 3 years: 10/01/05-09/30/08
- 2003 – 2007 *Principal Investigator*, “Blocking TGF-beta immune signaling as a therapeutic target for Alzheimer’s disease”, first part of the K99/R00 “Pathway to Independence” award 1K99AG029726-01 from NIH/NIA, \$90,000 for 1 year: 12/01/06-11/30/07
- 2003 – 2006 *Principal Investigator*, “A conditional mouse model of Alzheimer’s disease”, Ruth L. Kirschstein NRSA Post-Doctoral Fellowship 1F32AG022772 from NIH/NIA, \$130,000 over 3 years: 08/15/03-08/14/06

LECTURES AND PRESENTATIONS

- 1996 – 2002 Alzheimer’s disease journal club (once per month), Department of Psychiatry and Behavioral Medicine, Roskamp Institute/University of South Florida, Tampa, FL
- 2001 Invited research seminar, “CD40-CD40L interaction in the pathoetiology of Alzheimer’s disease” sponsored by Department of Psychiatry and Behavioral Medicine, University of South Florida, Tampa, FL
- 2002 – 2007 “Research in Progress” seminars in Immunobiology (approximately once every 2 years), Department of Immunobiology, Yale University School of Medicine, New Haven, CT
- 2004 Invited research seminar, “Toll-like receptor 3 mediates West Nile virus entry into the brain causing lethal encephalitis” sponsored by Department of Psychiatry and Behavioral Medicine, University of South Florida, Tampa, FL
- 2007 Invited research seminar, “Blocking TGF- β innate immune signaling mitigates Alzheimer-like pathology in transgenic mice” sponsored by Institute for Basic Research in Staten Island, New York, NY
- 2008 Invited research seminar, “Stumpy: a novel gene required for mammalian ciliogenesis and postnatal neurogenesis” sponsored by Department of Neurology, UCLA, Los Angeles, CA
- 2008 Scheduled to give Research Grand Rounds, “Blocking TGF- β innate immune signaling mitigates Alzheimer-like pathology in transgenic mice” sponsored by Cedars-Sinai Medical Center
- 2008 Scheduled to give Renal Grand Rounds, “Cilia: what the brain and kidney have in common” sponsored by Cedars-Sinai Medical Center
- 2008 Scheduled to give Endocrine Grand Rounds, “Blocking TGF- β innate immune signaling mitigates Alzheimer-like pathology in transgenic mice” sponsored by Cedars-Sinai Medical Center

RESEARCH PAPERS

A. Research Papers – Peer-reviewed

1. Fallin D, Kundtz A, **Town T**, Gauntlett AC, Duara R, Barker W, Crawford F, Mullan M. No association between the low density lipoprotein receptor-related protein (LRP) gene and late-onset Alzheimer’s disease in a community-based sample (1997). *Neuroscience Letters*, 223: 145-147.
2. Paris D, **Town T**, Parker TA, Humphrey J, Mullan M. Isoform-specific vasoconstriction induced by apolipoprotein E and modulation of this effect by Alzheimer’s β -amyloid peptide (1998). *Neuroscience Letters*, 256: 73-76.
3. **Town T***, Paris D, Fallin D, Duara R, Barker W, Gold M, Crawford F, Mullan M. The -491A/T apolipoprotein E promoter polymorphism association with Alzheimer’s disease: independent risk and

linkage disequilibrium with the known APOE polymorphism (1998). *Neuroscience Letters*, 252: 95-98.
*corresponding author

4. Paris D, Parker T, **Town T**, Suo Z, Fang C, Humphrey J, Crawford F, Mullan M. Role of peroxynitrite in the vasoactive and cytotoxic effects of Alzheimer's β -amyloid₁₋₄₀ peptide (1998). *Experimental Neurology*, 152: 116-122.
5. Crawford F, Freeman M, **Town T**, Fallin D, Gold M, Duara R, Mullan M. No genetic association between polymorphisms in the Tau gene and Alzheimer's disease in clinic or population based samples (1999). *Neuroscience Letters*, 266: 193-196.
6. Paris D, **Town T**, Parker TA, Tan J, Humphrey J, Crawford F, Mullan M. Inhibition of Alzheimer's β -amyloid induced vasoactivity and proinflammatory response in microglia by a cGMP-dependent mechanism (1999). *Experimental Neurology*, 157: 211-221.
7. **Town T***, Abdullah L, Crawford F, Schinka J, Ordorica PI, Francis E, Hughes P, Duara R, Mullan M. Association of a functional μ -opioid receptor allele (+118A) with alcohol dependency (1999). *American Journal of Medical Genetics (Neuropsychiatric Genetics)*, 88: 458-461. *corresponding author
8. Tan J*, **Town T***, Paris D*, Mori T, Suo Z, Crawford F, Mattson MP, Flavell RF, Mullan M. Microglial activation resulting from CD40-CD40L interaction after β -amyloid stimulation (1999). *Science*, 286:2352-55. *First author equivalent contribution.
9. Tan J, **Town T**, Suo Z, Wu Y, Song S, Kundtz A, Kroeger J, Humphrey J, Crawford F, Mullan M. Induction of CD40 on human endothelial cells by Alzheimer's β -amyloid peptides (1999). *Brain Research Bulletin*, 50:143-8.
10. **Town T***, Paris D, Parker TA, Kundtz A, Tan J, Duara R, Gold M, Crawford F, Mullan M. Alzheimers disease is not associated with hypertension genetic risk factors PLA2 or G protein β 3, either independently or interactively with apolipoprotein E (1999). *American Journal of Medical Genetics (Neuropsychiatric Genetics)*, 88: 465-468. *corresponding author
11. Tan J, **Town T**, Placzek A, Kundtz A, Yu H, Mullan M. Bcl-x_L inhibits apoptosis and necrosis produced by Alzheimer's β -amyloid₁₋₄₀ peptide in PC12 cells (1999). *Neuroscience Letters*, 272: 5-8.
12. Crawford F, **Town T**, Freeman M, Schinka J, Gold M, Duara R, Mullan M. The alpha-2 macroglobulin gene is not associated with Alzheimer's disease in a case-control sample (1999). *Neuroscience Letters*, 270: 133-136.
13. Tan J, **Town T**, Saxe M, Paris D, Wu Y, Mullan M. Ligation of microglial CD40 results in p44/42 mitogen-activated protein kinase-dependent TNF- α production that is opposed by TGF- β 1 and IL-10 (1999). *Journal of Immunology*, 163:6614-21.
14. Tan, J, **Town T**, Paris D, Placzek A, Parker T, Crawford F, Yu H, Humphrey J, Mullan M. Activation of microglial cells by the CD40 pathway: relevance to multiple sclerosis (1999). *Journal of Neuroimmunology*, 97: 77-85.
15. Paris D, **Town T**, Humphrey J, Yokota K, Mullan M. Cholesterol modulates vascular reactivity to endothelin-1 by stimulating a pro-inflammatory pathway (2000). *Biochemical and Biophysical Research Communications*, 274:553-558.

16. Paris D, **Town T**, Mori T, Parker TA, Humphrey J, Mullan M. Soluble β -amyloid peptides mediate vasoactivity via activation of a pro-inflammatory pathway (2000). *Neurobiology of Aging*, 21:183-197.
17. Tan J, **Town T**, Mori T, Wu Y, Saxe M, Crawford F, Mullan M. CD45 opposes β -amyloid peptide-induced microglial activation via inhibition of p44/42 mitogen-activated protein kinase (2000). *Journal of Neuroscience*, 20:7587-7594.
18. Tan J, **Town T**, Mullan M. CD45 inhibits CD40L-induced microglial activation via negative regulation of the Src/p44/42 MAPK pathway (2000). *Journal of Biological Chemistry*, 275: 37224-37231.
19. Paris D, **Town T**, Mullan M. Novel strategies for opposing murine microglial activation (2000). *Neuroscience Letters*, 278:5-8.
20. Mori T, Paris D, **Town T**, Rojiani AM, Sparks DL, DelleDonne A, Crawford F, Abdullah LI, Humphrey JA, Dickson DW, Mullan MJ. Cholesterol accumulates in senile plaques of Alzheimer's disease patients and in transgenic APP_{sw} mice (2001). *Journal of Neuropathology and Experimental Neurology*, 60:778-85.
21. **Town T***, Tan J, Sansone N, Obregon D, Klein T, Mullan M. Characterization of murine immunoglobulin G antibodies against human amyloid- β_{1-42} (2001). *Neuroscience Letters*, 307: 101-4. *corresponding author
22. Mori T, Nagata K, **Town T**, Tan J, Matsui T, Asano T. Intracisternal increase of superoxide anion production in a canine subarachnoid hemorrhage model (2001). *Stroke*, 32: 636-642.
23. Schinka JA, **Town T**, Abdullah L, Crawford FC, Ordorica PI, Francis E, Hughes P, Graves A, Mortimer JA, Mullan M. A functional polymorphism within the μ -opioid receptor gene and risk for abuse of alcohol and other substances (2002). *Molecular Psychiatry*, 7:224-228.
24. Tan J*, **Town T***, Crawford F, Mori T, DelleDonne A, Crescentini R, Obregon D, Flavell RA, Mullan MJ. Role of CD40 ligand in amyloidosis in transgenic Alzheimer's mice (2002). *Nature Neuroscience*, 5:1288-1293. *First author equivalent contribution.
25. Tan J*, **Town T***, Abdullah L, Wu Y, Placzek A, Small B, Kroeger J, Crawford F, Richards D, Mullan M. CD45 isoform alteration on CD4+ T as a potential diagnostic marker of Alzheimer's disease (2002). *Journal of Neuroimmunology*, 132:164-172. *First author equivalent contribution.
26. **Town T***, Vendrame M, Patel A, Poetter D, DelleDonne A, Mori T, Smeed R, Crawford F, Klein T, Tan J, Mullan M. Reduced Th1 and enhanced Th2 immunity after immunization with Alzheimer's β -amyloid peptide(1-42) (2002). *Journal of Neuroimmunology*, 132:49-59. *corresponding author.
27. **Town T**, Zolton J, Shaffner R, Schnell B, Crescentini R, Wu Y, Zeng J, DelleDonne A, Obregon D, Tan J, Mullan M. p35/Cdk5 pathway mediates soluble A β peptide-induced tau phosphorylation *in vitro* (2002). *Journal of Neuroscience Research*, 69:362-372.
28. Ait-Ghezala G, Abdullah L, Crescentini R, Crawford F, **Town T**, Singh S, Richards D, Duara R, Mullan M. Confirmation of association between D10S583 and Alzheimer's disease in a case-control sample (2002). *Neuroscience Letters*, 325:87-90.
29. Tan J, **Town T**, Mori T, Obregon D, Wu Y, DelleDonne A, Rojiani A, Crawford F, Flavell RA, Mullan M. CD40 is expressed and functional on neuronal cells (2002). *The EMBO Journal*, 21:643-652.

30. Mori T, Kobayashi M, **Town T**, Fujita S, Asano T. Increased vulnerability to focal ischemic brain injury in human apolipoprotein E4 knock-in mice (2003). *Journal of Neuropathology and Experimental Neurology*, 62:280-291.
31. Wang T*, **Town T***, Alexopoulou L*, Anderson JF, Fikrig E, Flavell RA. Toll-like receptor 3 mediates West Nile virus entry into the brain causing lethal encephalitis (2004). *Nature Medicine*, 10:1366-1373. *First author equivalent contribution.
32. Mori T, **Town T**, Kobayashi M, Tan J, Fujita SC, Asano T. Augmented delayed infarct expansion and reactive astrocytosis after permanent focal ischemia in apolipoprotein E4 knock-in mice (2004). *Journal of Cerebral Blood Flow and Metabolism*, 24:646-656.
33. Townsend KP, Vendrame M, Ehrhart J, Faza B, Zeng J, **Town T**, Tan J. CD45 isoform RB as a molecular target to oppose lipopolysaccharide-induced microglial activation in mice (2004). *Neuroscience Letters*, 362:26-30.
34. Mott RT, Ait-Ghezala G*, **Town T***, Mori T, Vendrame M, Zeng J, Ehrhart J, Mullan M, Tan J. Neuronal expression of CD22: Novel mechanism for inhibiting microglial proinflammatory cytokine production (2004). *Glia*, 46:369-379 *These authors contributed equally to this work.
35. Roach T, Volmar CH, Dwivedi S, **Town T**, Crescentini R, Crawford F, Tan J, Mullan M. Behavioral effects of CD40-CD40L pathway disruption in aged PSAPP mice (2004). *Brain Research*, 1015:161-168.
36. Spilianakis CG, Lalioti M*, **Town T***, Lee GR, Flavell RA. I, Interchromosomal associations between alternatively expressed loci (2005). *Nature* (article), 435:637-645. *These authors contributed equally to this work.
37. Rezai-Zadeh K, Shytle D, Sun N, Mori T, Hou H, Jeanniton D, Ehrhart J, Townsend K, Zeng J, Morgan D, Hardy J, **Town T**, Tan J. Green tea epigallocatechin-3-gallate (EGCG) modulates amyloid precursor protein cleavage and reduces amyloidosis in Alzheimer transgenic mice (2005). *Journal of Neuroscience*, 25:8807-8814.
38. Kimberly WT*, Zheng JB*, **Town T**, Flavell RA, Selkoe DJ. Physiological regulation of the beta-amyloid precursor protein signaling domain by c-Jun N-terminal kinase JNK3 during neuronal differentiation (2005). *Journal of Neuroscience*, 25:5533-5543. *First author equivalent contribution.
39. Townsend K, **Town T**, Mori T, Lue LF, Shytle D, Sanberg PR, Morgan D, Fernandez F, Flavell, RA, Tan J. CD40 signaling regulates innate and adaptive activation of microglia in response to A β peptide (2005). *European Journal of Immunology*, 35:901-910.
40. Mori T, **Town T**, Tan J, Tateishi N, Asano T. Modulation of astrocytic activation by arundic acid (ONO-2506) mitigates detrimental effects of the apolipoprotein E4 isoform after permanent focal ischemia in apolipoprotein E knock-in mice (2005). *Journal of Cerebral Blood Flow and Metabolism*, 25:748-762.
41. Mori T, **Town T**, Tan J, Yamamoto J, Yada N, Shimota T, Tateishi N, Asano T. Arundic acid ameliorates cerebral amyloidosis and gliosis in Alzheimer transgenic mice (2006). *Journal of Pharmacology and Experimental Therapeutics*, 318:571-578.
42. Obregon D, Rezai-Zadeh K, Sun N, Bai Y, Hou H, Zeng J, Mori T, Shytle D, **Town T**, Tan J. ADAM10 activation is required for green tea EGCG-induced alpha-secretase cleavage of amyloid precursor protein (2006). *Journal of Biological Chemistry*, 281:16419-16427.

43. Wang R, **Town T**, Gokarn V, Flavell RA, Chandawarkar RY. HSP70 Enhances Macrophage Phagocytosis by Interaction With Lipid Raft-Associated TLR-7 and Upregulating p38 MAPK and PI3K Pathways (2006). *Journal of Surgical Research*, 136:58-69.
44. **Town T**, Jeng D, Alexopoulou L, Tan J, Flavell RA. Microglia recognize double-stranded RNA via Toll-like receptor 3 (2006). *Journal of Immunology*, 176:3804-3812.
45. Nikolic V, Bai Y, Obregon D, Hou H, Zeng J, Ehrhart J, Mori T, Shytle D, **Town T***, Tan J*. Transcutaneous A β immunization of Alzheimer's mice reduces cerebral amyloidosis in the absence of T-cell infiltration or microhemorrhage (2007). *PNAS*, 104:2507-2512. *corresponding authors
46. Arjona A, Ledizet M, Anthony K, Bonafe N, Modis Y, **Town T**, Fikrig E. West Nile Virus Envelope Protein Inhibits dsRNA-induced Innate Immune Responses (2007). *Journal of Immunology*, 179:8403-8409.
47. Deane JA, Pisitkun P, Barrett RS, Feigenbaum L, **Town T**, Ward JM, Flavell RA, Bolland S. Control of TLR7 expression is essential to restrict autoimmunity and dendritic cell expansion (2007). *Immunity*, 27:801-810.
48. Griffith J, O'Connor C, Bernard K, **Town T**, Goldstein D, Bucala R. Toll-like Receptor Modulation of Murine Cerebral Malaria is Dependent on the Genetic Background of the Host (2007). *The Journal of Infectious Diseases*, 196:1553-1564.
49. Arjona A, Foellmer HG, **Town T**, Leng L, McDonald C, Wang T, Wong SJ, Montgomery R, Fikrig E, Bucala R. Abrogation of Macrophage Migration Inhibitory Factor Decreases West Nile Virus Lethality by Limiting Viral Neuroinvasion (2007). *Journal of Clinical Investigation*, 117:3059-3066.
50. Bai F, **Town T**, Pradhan D, Cox J, Ashish, Ledizet M, Anderson J, Flavell RA, Krueger J, Koski R, Fikrig E. Antiviral Peptides Targeting the West Nile Virus Envelope Protein (2007). *Journal of Virology*, 81:2047-2055.
51. Watanabe A, Hashmi A, Gomes DA, **Town T**, Badou A, Flavell RA, Nathanson MH, Mehal WZ. Apoptotic Hepatocyte DNA Inhibits Stellate Cell Chemotaxis via TLR9 (2007). *Hepatology*, 46:1509-1518.
52. Obregon D, Bai Y, Hou H, Nikolic W, Mori T, Zeng J, Ehrhart J, Giunta B, Fernandez F, Morgan D, **Town T***, Tan J*. CD40L disruption enhances A β vaccine-mediated reduction of cerebral amyloidosis while minimizing cerebral amyloid angiopathy and inflammation (2008). *Neurobiology of Disease*, 29:336-353. *corresponding authors.
53. **Town T**, Breunig JJ, Sarkisian MR, Spilianakis C, Ayoub AE, Liu X, Ferrandino AF, Gallagher AR, Li MO, Rakic P, Flavell RA. The *stumpy* gene is required for mammalian ciliogenesis (2008). *PNAS*, 105:2853-2858.
54. Nikolic WV, Hou H, **Town T***, Zhu Y, Giunta B, Sanberg CD, Zeng J, Lou D, Ehrhart J, Mori T, Sanberg PR*, Tan J*. Peripherally administered human umbilical cord blood cells reduce parenchymal and vascular β -amyloid deposits in Alzheimer mice (2008). *Stem Cells and Development*, 17:1-17. *corresponding authors.
55. Dai J, Wang P, Bai F, **Town T**, Fikrig E. ICAM-1 participates in the entry of West Nile virus into the central nervous system (2008). *Journal of Virology*, 82:4164-4168.

56. Mohanty S, **Town T**, Yagi T, Scheidig C, Kwan KY, Allore HG, Flavell RA, Shaw AC. Defective p53 engagement after the induction of DNA damage in cells deficient in topoisomerase 3beta (2008). *PNAS*, 105:5063-5068.

B. Research Papers – Peer-reviewed (In Press)

1. **Town T***, Lauoar Y, Pittenger C, Mori T, Tan J, Duman R, Flavell RA*. Blocking TGF- β innate immune signaling mitigates Alzheimer-like pathology in transgenic mice. *Nature Medicine*, in press.
*corresponding authors
2. Rezai-Zadeh K, Shytle RD, Bai Y, Tian J, Hou H, Mori T, Zeng J, Obregon D, **Town T**, Tan J. Flavonoid-mediated presenilin-1 phosphorylation reduces Alzheimer's disease β -amyloid production. *Journal of Cellular and Molecular Medicine*, in press.
3. Mori T, Tan J, Arendash GW, Koyama N, Nojima Y, **Town T**. Overexpression of Human S100B Exacerbates Brain Damage and Peri-infarct gliosis after permanent focal ischemia (2008). *Stroke*, in press.

C. Research Papers – Peer-reviewed (Submitted)

1. Laouar Y, **Town T**, Jeng D, Wan Y, Tran E, Kuchroo VJ, Flavell RA. TGF- β signaling in dendritic cells is a prerequisite for the control of autoimmune encephalomyelitis, *Nature Immunology*, under revision.
2. Spilianakis CG, **Town T**, Flavell RA. Interchromosomal interactions: positive and negative regulators of gene expression, *Cell*, submitted.

Chapters

1. Mullan M, Paris D, Suo Z, **Town T**, Placzek A, Parker T, Kundtz A, Humphrey J, Crawford F. β -amyloid vasoactivity *in vitro* and *in vivo* (1999). *Alzheimer's Disease and Related Disorders, Etiology, Pathogenesis and Therapeutics*. eds. Iqbal K, Swaab B, Winbald B, and Wisniewski, HM.; chap 46:419-427; John Wiley and Sons: Chichester, England.
2. Paris D, **Town T**, Parker T, Humphrey J, Mullan M. $A\beta$ vasoactivity and proinflammation in microglia can be blocked by cGMP-elevating agents (2000). *Annals of the New York Academy of Sciences*, 903:446-450.
3. Paris D, **Town T**, Parker T, Humphrey J, Mullan M. $A\beta$ vasoactivity: an inflammatory reaction (2000). *Annals of the New York Academy of Sciences*, 903:97-109.
4. Paris D, **Town T**, Mullan M. Vasoactivity of β -amyloid peptides (2000). *Cerebral Amyloid Angiopathy in Alzheimer's Disease and Related Disorders*. eds. Verbeek, MM, de Waal RMW, and Vinters, H; chap 17:281-294; Kluwer Academic Publishers: Dordrecht, The Netherlands.
5. **Town T**, Tan J. Soluble $A\beta_{1-42}$ peptide induces tau hyperphosphorylation *in vitro* (2006). *Cell biology protocols*, eds. Harris, JE, Graham, JM, Rickwood, D. Chapter 6.38: 348-352. John Wiley and Sons, West Sussex, England.
6. Szekely CA, **Town T**, Zandi PP. NSAIDs for the chemoprevention of Alzheimer's disease (2007). *Inflammation in the Pathogenesis of Chronic Diseases: The COX-2 Controversy – Subcellular Biochemistry Volume 42*, ed. Harris, RE. Chapter 11: 229-248. Springer: Dordrecht, The Netherlands.

Chapters (In Press)

1. Amsen D, de Visser K, **Town T**. Approaches to determine expression of inflammatory cytokines (2008). *Methods in Molecular Medicine: Inflammation and Cancer*, in press.

Letters to the Editor

1. **Town T**, Fallin D, Crawford F, Walsh S, Solomon R, Mullan M. Lack of association between the apolipoprotein E $\epsilon 4$ allele (APOE $\epsilon 4$) and chronic schizophrenia (1997). *American Journal of Medical Genetics (Neuropsychiatric Genetics)* 74: 451.

Reviews

1. **Town T***, Schinka J, Tan J, Mullan M. The opioid receptor system and alcoholism: a genetic perspective (2000). *European Journal of Pharmacology*, 410: 243-248. *corresponding author
2. **Town T**, Tan J, Mullan M. CD40 signaling and Alzheimer's disease pathogenesis (2001). *Neurochemistry International*, 39:371-80.
3. Tan J*, **Town T***, Mullan M. CD40-CD40L interactions in Alzheimer's disease (2002). *Current Opinion in Pharmacology*, 2:445-451. *First author equivalent contribution.
4. **Town T***, Nikolic V, Tan J*. The microglial "activation" continuum: from innate to adaptive responses (2005). *Journal of Neuroinflammation*, 2:24. *corresponding authors
5. **Town T**, Tan J, Flavell RA, Mullan M. T-Cells in Alzheimer disease (2005). *Neuromolecular Medicine*, 7:255-264.

Abstracts

1. Fallin D, Kundtz A, **Town T**, Gauntlett AC, Crawford F, Mullan M. No association between the low density lipoprotein receptor related protein (LRP) gene and late-onset Alzheimer's disease in a community-based sample (1997) (poster). *Society for Neuroscience 27th Annual Meeting*, New Orleans, LO, USA.

2. Tan J, **Town T**, Paris D, Suo Z, Song S, Yu H, Kundtz A, Crawford F, Mullan M. Ligation of a specific CD molecule initiates activation of microglial cells by Alzheimer's β -amyloid peptides (1998) (platform). *Society for Neuroscience 28th Annual Meeting*, Los Angeles, CA, USA.
3. **Town T**, Paris D, Fallin D, Crawford F, Mullan M. The -491A/T apolipoprotein E promoter polymorphism association with Alzheimer's disease: independent risk and linkage disequilibrium with the known APOE polymorphism (1998) (platform). *1998 Suncoast Biomolecular Science Conference*, Tampa, FL, USA.
4. Paris D, **Town T**, Parker T, Tan J, Humphrey J, Mullan M. Alzheimer A β peptides trigger a pro-inflammatory signal transduction pathway (1998) (platform). *6th International conference on Alzheimer's disease and related disorders*, Amsterdam, The Netherlands.
5. **Town T**, Abdullah L, Schinka J, Duara R, Crawford F, Mullan M. Association of a functional μ -opioid receptor allele (+118A) with alcohol dependency (1999) (platform). *Society for Neuroscience 29th Annual Meeting*, Miami, FL, USA.
6. Paris D, **Town T**, Parker TA, Humphrey J, Mullan M. β -amyloid triggers vasoactivity via activation of a pro-inflammatory pathway (1999) (platform). *Society for Neuroscience 29th Annual Meeting*, Miami, FL, USA.
7. Tan J, **Town T**, Saxe M, Paris D, Wu Y, Mullan M. Ligation of microglial CD40 results in p44/42 MAPK-dependent TNF- α production that is opposed by TGF- β 1 and IL-10 (1999) (platform). *Society for Neuroscience 29th Annual Meeting*, Miami, FL, USA.
8. Paris D, **Town T**, Parker T, Humphrey J, Crawford F, Mullan M. A β vasoactivity and pro-inflammation in microglia can be blocked by cGMP-elevating agents (1999) (platform). *Vascular Factors in Alzheimer's Disease*, Slaley Hall, Northumberland, UK.
9. **Town T**, Abdullah L, Crawford F, Schinka J, Ordorica P, Francis E, Hughes P, Duara R, Mullan M. Association of a functional μ -opioid receptor allele (+118A) with alcohol dependency (2000) (platform). *8th World Congress on Psychiatric Genetics*, Versailles, France.
10. **Town T**, Tan J, Placzek A, Abdullah L, Wu Y, Crawford F, Mullan M. Use of CD4⁺ T cell CD45 isoform expression in conjunction with APOE ϵ 4 as a potential diagnostic marker of Alzheimer's disease (2000) (platform). *Society for Neuroscience 30th Annual Meeting*, New Orleans, LO, USA.
11. Mullan M, **Town T**, Paris D, Crawford F, Tan J. The CD40 pathway mediates β -amyloid-induced microglial activation (2000) (platform). *Society for Neuroscience 30th Annual Meeting*, New Orleans, LO, USA.
12. Tan J, **Town T**, Mullan M. CD45 inhibits CD40L-induced microglial activation via negative regulation of the Src-p44/42 MAPK pathway. (2000) (platform). *Society for Neuroscience 30th Annual Meeting*, New Orleans, LO, USA.
13. **Town T**, Tan J, Mullan M. Role of the microglial CD40-CD40L interaction in Alzheimer's disease pathogenesis and in aging (2000) (platform). *2000 Suncoast Biomolecular Science Conference*, Tampa, FL, USA.
14. Abdullah L, **Town T**, Schinka J, Yokota K, Ordorica P, Francis E, Duara R, Graves A, Mortimer J, Crawford F, Mullan M (2000) (poster). The OPRM1 +118A allele is associated with alcohol dependency and other addictive behavior. *2000 Suncoast Biomolecular Science Conference*, Tampa, FL, USA.

15. Humphrey J, Paris D, **Town T**, K Townsend, Yokota K, Mullan M. Cholesterol modulates endothelin-1-induced vasoconstriction by stimulating a pro-inflammatory pathway (2000) (poster). *2000 Suncoast Biomolecular Science Conference*, Tampa, FL, USA.
16. **Town T**, Tan J, Mullan M. Role of CD40 in Alzheimer's disease and in aging (2000) (platform). *American Association of Medical Science Graduate Students Fall Research Symposium*, Tampa, FL, USA.
17. Tan J, **Town T**, Paris D, Mori T, Crawford F, Mullan M. The CD40-CD40L interaction leads to microglial activation following β -amyloid stimulation (2000) (poster). *7th International Conference on Alzheimer's Disease and Related Disorders*, Washington DC, USA.
18. Paris D, **Town T**, Mori T, Humphrey J, Mullan M. Soluble β -amyloid peptides mediate vasoactivity via activation of a pro-inflammatory pathway (2000) (poster). *7th International Conference on Alzheimer's Disease and Related Disorders*, Washington DC, USA.
19. K Townsend, Paris D, **Town T**, Humphrey J, Yokota K, Mullan M. Cholesterol as well as A β induces vasoconstriction by stimulating a similar pro-inflammatory pathway (2000) (poster). *7th International Conference on Alzheimer's Disease and Related Disorders*, Washington DC, USA.
20. **Town T**, Tan J, Paris D, Wu Y, Mullan M. Ligation of microglial CD40 results in Src kinase-induced p44/42 MAPK-dependent TNF- α production (2000) (poster). *7th International Conference on Alzheimer's Disease and Related Disorders*, Washington DC, USA.
21. Tan J, **Town T**, Paris D, Mori T, Crawford F, Mullan M. The CD40-CD40L interaction leads to microglial activation following β -amyloid stimulation (2000) (poster). *Neuroinflammation in Alzheimer's disease*, Washington DC, USA.
22. **Town T**, Tan J, Paris D, Wu Y, Mullan M. Ligation of microglial CD40 results in Src kinase-induced p44/42 MAPK-dependent TNF- α production (2000) (poster). *Neuroinflammation in Alzheimer's disease*, Washington DC, USA.
23. Mullan M, **Town T**, Paris D, Crawford F, Mattson MP, Flavell RA, Tan J. Microglial activation resulting from CD40-CD40L interaction after β -amyloid stimulation (2000) (poster). *Federation of European Neuroscience Societies 2nd Forum Meeting*, Brighton, UK.
24. **Town T**, Tan J, DelleDonne A, Sansone N, Obregon D, Klein T, Mullan M. β -amyloid₁₋₄₂ as an immunogen: antibody and Th1/Th2 responses after immunization (2001) (poster). *Society for Neuroscience 31st Annual Meeting*, San Diego, CA, USA.
25. Mullan M, **Town T**, Mori T, Pompl P, DelleDonne A, Crawford F, Flavell RA, Tan J. Transgenic mice overexpressing mutant APP but deficient for CD40L have reduced Alzheimer-like pathology (2001) (poster). *Society for Neuroscience 31st Annual Meeting*, San Diego, CA, USA.
26. Tan J, **Town T**, Mori T, Wu Y, DelleDonne A, Obregon D, Rojiani A, Flavell RA, Mullan M. CD40 is expressed and functional on neuronal cells (2001) (poster). *Society for Neuroscience 31st Annual Meeting*, San Diego, CA, USA.
27. Tan J, **Town T**, Mori T, Wu Y, DelleDonne A, Obregon D, Rojiani A, Flavell R, Mullan M. CD40 is expressed on neuronal cells and promotes differentiation and survival (2001) (poster). *8th Annual Conference for Neuronal Transplantation & Repair*, Clearwater, FL, USA.

28. **Town T**, Zolton J, Shaffner R, Schnell B, Crescentini R, Wu Y, DelleDonne A, Obregon D, Tan J, Mullan M. The p35/Cdk5 pathway mediates soluble Abeta-induced tau phosphorylation in vitro (2002) (poster). *Society for Neuroscience 32nd Annual Meeting*, Orlando, FL, USA.
29. Tan J, **Town T**, Mori T, Obregon D, Wu Y, DelleDonne A, Rojiani A, Crawford F, Flavell RA, Mullan M. Role of the CD40 signaling pathway in promoting neuronal cell differentiation and survival (2002) (poster). *Society for Neuroscience 32nd Annual Meeting*, Orlando, FL, USA.
30. Obregon D, **Town T**, Vendrame M, Mott R, Lindsey B, Humphrey J, Wu Y, Zeng J, Tan J, Mullan M. CD45 isoform, RB is critically involved in negative regulation of Abeta-induced microglial activation (2002) (poster). *Society for Neuroscience 32nd Annual Meeting*, Orlando, FL, USA.
31. Mori T, Kobayashi M, **Town T**, Fujita SC, Asano T. Human Apolipoprotein E4 knock-in mice show increased vulnerability to permanent focal cerebral ischaemia (2002) (poster). *Society for Neuroscience 32nd Annual Meeting*, Orlando, FL, USA.
32. Roach JT, **Town T**, Volmar C, Crescentini R, Smeed R, Obregon D, Crawford F, Tan J, Mullan M. Behavioral deficits in PSAPP mice are attenuated following administration of antibody to CD40 ligand (2002) (platform). *Society for Neuroscience 32nd Annual Meeting*, Orlando, FL, USA.
33. Vendrame M, **Town T**, Sansone N, Nolan M, Tan J, Mullan M. Analysis of circulating pro- and anti-inflammatory cytokines in AD patients and controls (2002) (poster). *Society for Neuroscience 32nd Annual Meeting*, Orlando, FL, USA.
34. **Town T**, Obregon D, Zolton J, Shaffner R, Schnell B, Wu Y, DelleDonne A, Crescentini R, Mullan M. The p35/cdk5 pathway mediates soluble A β -induced *tau* phosphorylation *in vitro* (2002) (platform). *The 8th International Conference on Alzheimer's disease and Related Disorders, Stockholm, Sweden*.
35. Mullan M, **Town T**, Mori T, DelleDonne A, Obregon D, Crescentini R, Crawford F, Flavell RA, Tan J. Disruption of CD40-CD40L interaction in transgenic mice mitigates Alzheimer-like pathology (2002) (platform). *The 8th International Conference on Alzheimer's disease and Related Disorders, Stockholm, Sweden*.
36. **Town T**, Tan J, Crawford F, DelleDonne A, Klein T, Mullan M. Increased Th2 and attenuated Th1 immune responses after immunization with amyloid- β_{1-42} (2002) (poster). *The 8th International Conference on Alzheimer's disease and Related Disorders, Stockholm, Sweden*.
37. Tan J, **Town T**, Mori T, Wu Y, Crawford F, Mullan M. CD45 Opposes β -amyloid peptide-induced microglial activation via inhibition of mitogen-activated protein kinase (2002) (poster). *The 8th International Conference on Alzheimer's disease and Related Disorders, Stockholm, Sweden*.
38. DelleDonne A, Mori T, Paris D, **Town T**, Crawford F, Abdullah L, Dickson D, Mullan M. Cholesterol accumulates in senile plaques of Alzheimer's disease patients and in transgenic APPsw mice (2002) (poster). *The 8th International Conference on Alzheimer's disease and Related Disorders, Stockholm, Sweden*.
39. Ait Ghezala G, Abdullah L, Crescentini R, Crawford F, **Town T**, Singh S, Richards D, Duara R, Mullan M. Confirmation of association between D10S583 and Alzheimer's disease in a case-control sample (2002) (platform). *The 8th International Conference on Alzheimer's disease and Related Disorders, Stockholm, Sweden*.
40. Mullan MJ, Tan J, **Town T**. The role of CD40 in Alzheimer's disease pathogenesis (platform) (2003). *American Society for Neurochemistry 34th Annual Meeting*, Newport Beach, CA, USA.

41. Tan J, Erhart J, Vendrame M, Zeng J, Wu Y, Sun N, Mori T, Fernandez F, **Town T**. Role of CD40-CD40L interaction in microglial phagocytosis and antigen presentation of beta-amyloid peptides (2003) (poster). *Society for Neuroscience 33rd Annual Meeting*, New Orleans, LO, USA.
42. Mullan MJ, Ait-Ghezala G, Paris D, Crawford F, DelleDonne A, **Town T**, Tan J. The role of downstream signaling in CD40/CD40L mediated AD pathology (2003) (platform). *Society for Neuroscience 33rd Annual Meeting*, New Orleans, LO, USA.
43. Mori T, **Town T**, Kobayashi M, Fujita S, Asano T. APOE e4 allele promotes delayed infarct expansion after permanent focal ischemia in APOE knock-in mice (2003) (poster). *Society for Neuroscience 33rd Annual Meeting*, New Orleans, LO, USA.
44. Ait Ghezala G, Mott RT, Vendrame M, DelleDonne A, Zeng J, Smeed R, Wu Y, **Town T**, Mullan MJ, Tan J. Neuronal expression of CD22: mechanism for inhibiting proinflammatory microglial cytokine production (2003) (platform). *Society for Neuroscience 33rd Annual Meeting*, New Orleans, LO, USA.
45. Mori T, **Town T**, Kobayashi M, Tan J, Tateishi N, Fujita SC, Asano T. ONO-2506 mitigates detrimental effects of the apolipoprotein E4 isoform after focal ischemia in APOE knock-in mice (2004) (poster). *Society for Neuroscience 34th Annual Meeting*, San Diego, CA, USA.
46. Tan J, Townsend K, Lue LF, Sun N, Zeng J, Mori T, Shytle D, Morgan D, **Town T**. Regulation of the innate and adaptive activation of microglia in responses to A β by CD40 signaling (2004) (poster). *9th International Conference on Alzheimer's disease and Related Disorders*, Philadelphia, PA, USA.
47. Vendrame M, Townsend K, Ehrhart J, Faza B, Zeng J, **Town T**, Tan J. CD45 isoform RB as a molecular target to oppose LPS-induced microglial activation (2004) (poster). *9th International Conference on Alzheimer's disease and Related Disorders*, Philadelphia, PA, USA.
48. Zheng JB, Kimberly WT, **Town T**, Flavell RA, Selkoe DJ. Regulation of AICD signaling by the JNK3 mitogen activated pathway during neuronal differentiation (2004) (poster). *9th International Conference on Alzheimer's disease and Related Disorders*, Philadelphia, PA, USA.
49. Mori T, **Town T**, Tan J, Yamamoto J, Shimoda T, Tateishi N, Asano T. Modulation of activated astrocytes by arundic acid (ONO-2506) ameliorates cerebral amyloidosis in an Alzheimer transgenic mouse (2005) (poster). *Society for Neuroscience 35th Annual Meeting*, Washington, DC, USA.
50. Tan J, Rezai-Zadeh K, Sun N, Mori T, Hou H, Jeanniton D, Ehrhart J, Townsend K, Zeng J, Morgan D, Hardy J, **Town T**, Shytle D. Green tea epigallocatechin-3-gallate (EGCG) modulates amyloid precursor protein cleavage and reduces amyloidosis in Alzheimer transgenic mice (2005) (platform). *Society for Neuroscience 35th Annual Meeting*, Washington, DC, USA.
51. **Town T**, Pittenger C, Laouar Y, Mori T, Tan J, Duman R, Flavell RA. Blocking TGF- β innate immune signaling mitigates Alzheimer-like pathology in transgenic mice (2006) (platform). *Society for Neuroscience 36th Annual Meeting*, Atlanta, GA, USA.
52. Mori T, **Town T**, Tan J, Yada N, Yamamoto J, Hoshikawa M, Asana T. Arundic acid (ONO-2506) ameliorates cerebral amyloidosis and gliosis in aged Alzheimer transgenic mice (2006) (poster). *Society for Neuroscience 36th Annual Meeting*, Atlanta, GA, USA.
53. Obregon D, Rezai-Zadeh K, Sun N, Bai Y, Hou H, Zeng J, Mori T, Shytle D, **Town T**, Tan J. ADAM10 activation is required for green tea EGCG-induced alpha-secretase cleavage of amyloid precursor protein (2006) (poster). *Society for Neuroscience 36th Annual Meeting*, Atlanta, GA, USA.

54. Yada N, Mori T, **Town T**, Tan J, Horikisho Y, Hoshikawa M, Mizote S, Kawaharada S, Nakanishi M, Yamamoto J, Shinagawa R, Shimoda T, Asano T, Kamanaka Y. Arundic acid (ONO-2506) opposes amyloidogenesis in aged Alzheimer transgenic mice (2006) (poster). *Society for Neuroscience 36th Annual Meeting*, Atlanta, GA, USA.
55. Nikolic V, Bai Y, Obregon D, Hou H, Zeng J, Mori T, Shytle D, **Town T**, Tan J. Transcutaneous immunization with A β peptide results in reduction of cerebral A β / β -amyloid deposits in a mouse model of Alzheimer's disease (2006) (poster). *Society for Neuroscience 36th Annual Meeting*, Atlanta, GA, USA.
56. Mori T, Tan J, Koyama N, Yoshiko N, Arendash G, **Town T**. Enhanced delayed infarct expansion and peri-infarct reactive astrogliosis of S100B transgenic mice after permanent focal ischemia (2007) (poster). *Society for Neuroscience 37th Annual Meeting*, San Diego, CA, USA.
57. Mori T, **Town T**, Tan J, Yada N, Yamamoto J, Hoshikawa M, Shinagawa R, Kamanaka Y, Koyama N, Asano T. A new therapeutic agent for Alzheimer disease: Modulation of reactive astrocytes by arundic acid (ONO-2506) attenuates cerebral amyloidosis and gliosis in Alzheimer transgenic mice (2007) (poster). *13th International Psychogeriatric Association 2007 Osaka Silver Congress*, Osaka, Japan.
58. Mori T, **Town T**, Tan J, Yada N, Yamamoto J, Hoshikawa M, Shinagawa R, Kamanaka Y, Koyama N, Asano T. A new therapeutic agent for Alzheimer disease: Modulation of reactive astrocytes by arundic acid (ONO-2506) reduces amyloidogenesis in Alzheimer transgenic mice (2007) (poster). *13th International Psychogeriatric Association 2007 Osaka Silver Congress*, Osaka, Japan.