

## Sara Michie

Professor of Pathology (Research), Emerita

### Bio

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#### ACADEMIC APPOINTMENTS

- Emeritus Faculty, Acad Council, Pathology
- Member, Bio-X

#### HONORS AND AWARDS

- Henry J. Kaiser Award for Excellence in Preclinical Teaching, Stanford Medical School (1998)

### Research & Scholarship

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#### CURRENT RESEARCH AND SCHOLARLY INTERESTS

Our laboratory studies the molecular mechanisms that control the migration of lymphocytes into sites of autoimmune-mediated tissue damage, such as pancreatic islets in type 1 diabetes and salivary glands in Sjogren's syndrome. Our long-term goals include better understanding of the pathogenesis of autoimmune diseases, and development of novel diagnostic and therapeutic strategies.

### Teaching

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#### GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Immunology (Phd Program)

### Publications

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#### PUBLICATIONS

- **Mucosal Addressin Cell Adhesion Molecule-1 Mediates T Cell Migration into Pancreas-Draining Lymph Nodes for Initiation of the Autoimmune Response in Type 1 Diabetes.** *International journal of molecular sciences*  
Li, Y., Gunderson, R. C., Xu, Z., Ai, W., Shen, F., Ye, J., Xu, B., Michie, S. A.  
2024; 25 (21)
- **LFA-1/ICAM-1 Adhesion Pathway Mediates the Homeostatic Migration of Lymphocytes from Peripheral Tissues into Lymph Nodes through Lymphatic Vessels.** *Biomolecules*  
Guo, J., Xu, Z., Gunderson, R. C., Xu, B., Michie, S. A.  
2023; 13 (8)
- **Expanding the spectrum of Kabuki syndrome with novel neuropathological, ocular and genetic findings in an autopsy case**  
Cayrol, R., Ahmadian, S., Michie, S., Lin, J., Born, D.  
OXFORD UNIV PRESS INC.2020: 677
- **Inhibition of VEGF (Vascular Endothelial Growth Factor)-A or its Receptor Activity Suppresses Experimental Aneurysm Progression in the Aortic Elastase Infusion Model.** *Arteriosclerosis, thrombosis, and vascular biology*  
Xu, B., Iida, Y., Glover, K. J., Ge, Y., Wang, Y., Xuan, H., Hu, X., Tanaka, H., Wang, W., Fujimura, N., Miyata, M., Shoji, T., Guo, et al  
2019: ATVBAHA119312497
- **Hypoxia-inducible factor 1 in clinical and experimental aortic aneurysm disease** *JOURNAL OF VASCULAR SURGERY*

- Wang, W., Xu, B., Xuan, H., Ge, Y., Wang, Y., Wang, L., Huang, J., Fu, W., Michie, S. A., Dalman, R. L.  
2018; 68 (5): 1538-+
- **Hypoxia-inducible factor 1 in clinical and experimental aortic aneurysm disease.** *Journal of vascular surgery*  
Wang, W., Xu, B., Xuan, H., Ge, Y., Wang, Y., Wang, L., Huang, J., Fu, W., Michie, S. A., Dalman, R. L.  
2017
  - **Human hepatic organoids for the analysis of human genetic diseases** *JCI INSIGHT*  
Guan, Y., Xu, D., Garfin, P. M., Ehmer, U., Hurwitz, M., Enns, G., Michie, S., Wu, M., Zheng, M., Nishimura, T., Sage, J., Peltz, G.  
2017; 2 (17)
  - **Human hepatic organoids for the analysis of human genetic diseases.** *JCI insight*  
Guan, Y., Xu, D., Garfin, P. M., Ehmer, U., Hurwitz, M., Enns, G., Michie, S., Wu, M., Zheng, M., Nishimura, T., Sage, J., Peltz, G.  
2017; 2 (17)
  - **Angiotensin 1-7 Suppresses Experimental Abdominal Aortic Aneurysms**  
Li, G., Xu, B., Deng, H., Cabot, A., Yuan, H., Wu, X., Michie, S. A., Dalman, R. L.  
MOSBY-ELSEVIER.2017: 198S-199S
  - **Inhibition or deletion of angiotensin II type 1 receptor suppresses elastase-induced experimental abdominal aortic aneurysms.** *Journal of vascular surgery*  
Xuan, H., Xu, B., Wang, W., Tanaka, H., Fujimura, N., Miyata, M., Michie, S. A., Dalman, R. L.  
2017
  - **A silk-based encapsulation platform for pancreatic islet transplantation improves islet function in vivo** *JOURNAL OF TISSUE ENGINEERING AND REGENERATIVE MEDICINE*  
Hamilton, D. C., Shih, H. H., Schubert, R. A., Michie, S. A., Staats, P. N., Kaplan, D. L., Fontaine, M. J.  
2017; 11 (3): 887-895
  - **ICAM-1 Promotes Experimental Aortic Aneurysms Through Recruitment of Circulating Leukocytes**  
Xu, B., Iida, Y., Xuan, H., Li, S., Fujimura, N., Michie, S. A., Dalman, R. L.  
MOSBY-ELSEVIER.2016: 62S-63S
  - **Diagnostic Dilemma in the Treatment of a Fatal Case of Bloody Diarrhea.** *Journal of investigative medicine high impact case reports*  
Mahapatra, S., Michie, S. A., Sylvester, K., Cornfield, D.  
2016; 4 (1): 2324709616638698-?
  - **Does Metformin Suppress Aneurysmal Aortic Degeneration?**  
Xu, B., Kettler, E., Xiong, J., Fujimura, N., Xuan, H., Glover, K. J., Michie, S. A., Mell, M. W., Dalman, R. L.  
MOSBY-ELSEVIER.2015: 524
  - **Humanized Thymidine Kinase-NOG Mice Can Be Used to Identify Drugs That Cause Animal-Specific Hepatotoxicity: A Case Study with Furosemide** *JOURNAL OF PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS*  
Xu, D., Michie, S. A., Zheng, M., Takeda, S., Wu, M., Peltz, G.  
2015; 354 (1): 73-78
  - **Immune Modulator FTY720 Suppresses Experimental Abdominal Aortic Aneurysms**  
Fujimura, N., Xu, B., Xuan, H., Xiong, J. J., Deng, H., Michie, S. A., Dalman, R. L.  
MOSBY-ELSEVIER.2015: 171S-172S
  - **Chimeric TK-NOG Mice: A Predictive Model for Cholestatic Human Liver Toxicity.** *journal of pharmacology and experimental therapeutics*  
Xu, D., Wu, M., Nishimura, S., Nishimura, T., Michie, S. A., Zheng, M., Yang, Z., Yates, A. J., Day, J. S., Hillgren, K. M., Takeda, S. T., Guan, Y., Guo, et al  
2015; 352 (2): 274-280
  - **A silk-based encapsulation platform for pancreatic islet transplantation improves islet function in vivo.** *Journal of tissue engineering and regenerative medicine*  
Hamilton, D. C., Shih, H. H., Schubert, R. A., Michie, S. A., Staats, P. N., Kaplan, D. L., Fontaine, M. J.  
2015

- **VCAM-1/alpha 4 beta 1 Integrin Interaction Is Crucial for Prompt Recruitment of Immune T Cells into the Brain during the Early Stage of Reactivation of Chronic Infection with Toxoplasma gondii To Prevent Toxoplasmic Encephalitis** *INFECTION AND IMMUNITY*  
Sa, Q., Ochiai, E., Sengoku, T., Wilson, M. E., Brogli, M., Crutcher, S., Michie, S. A., Xu, B., Payne, L., Wang, X., Suzuki, Y.  
2014; 82 (7): 2826-2839
- **Propagermanium, a CCR2 Signaling Inhibitor, Suppresses Monocyte Mobilization and Migration in Experimental Aneurysms**  
Fujimura, N., Xu, B., Xuan, H., Dalman, J., Furusho, Y., Tanaka, H., Glover, K., Rouer, M., Aoyama, K., Michie, S. A., Dalman, R. L.  
MOSBY-ELSEVIER.2014: 81S–82S
- **CCR7 directs the recruitment of T cells into inflamed pancreatic islets of nonobese diabetic (NOD) mice.** *Immunologic research*  
Shan, Z., Xu, B., Mikulowska-Mennis, A., Michie, S. A.  
2014; 58 (2-3): 351-357
- **Fialuridine Induces Acute Liver Failure in Chimeric TK-NOG Mice: A Model for Detecting Hepatic Drug Toxicity Prior to Human Testing.** *PLoS medicine*  
Xu, D., Nishimura, T., Nishimura, S., Zhang, H., Zheng, M., Guo, Y., Masek, M., Michie, S. A., Glenn, J., Peltz, G.  
2014; 11 (4)
- **Fialuridine induces acute liver failure in chimeric TK-NOG mice: a model for detecting hepatic drug toxicity prior to human testing.** *PLoS medicine*  
Xu, D., Nishimura, T., Nishimura, S., Zhang, H., Zheng, M., Guo, Y., Masek, M., Michie, S. A., Glenn, J., Peltz, G.  
2014; 11 (4)
- **Enabling Autologous Human Liver Regeneration With Differentiated Adipocyte Stem Cells** *CELL TRANSPLANTATION*  
Xu, D., Nishimura, T., Zheng, M., Wu, M., Su, H., Sato, N., Lee, G., Michie, S., Glenn, J., Peltz, G.  
2014; 23 (12): 1573-1584
- **Protein polymer hydrogels: Effects of endotoxin on biocompatibility.** *Journal of biomaterials applications*  
Beenken-Rothkopf, L. N., Karfeld-Sulzer, L. S., Zhang, X., Kissler, H., Michie, S. A., Kaufman, D. B., Fontaine, M. J., Barron, A. E.  
2013; 28 (3): 395-406
- **VCAM-1/alpha 4 beta 1 integrin interaction is important for T cell recruitment to prevent reactivation of chronic infection with Toxoplasma gondii in the brain**  
Sa, Q., Michie, S., Xu, B., Payne, L., Wang, X., Suzuki, Y.  
AMER ASSOC IMMUNOLOGISTS.2013
- **Text-mining applied to autoimmune disease research: the Sjogren's syndrome knowledge base** *BMC MUSCULOSKELETAL DISORDERS*  
Gorr, S., Wennblom, T. J., Horvath, S., Wong, D. T., Michie, S. A.  
2012; 13
- **Systems analysis of primary Sjogren's syndrome pathogenesis in salivary glands identifies shared pathways in human and a mouse model** *ARTHRITIS RESEARCH & THERAPY*  
Horvath, S., Nazmul-Hossain, A. N., Pollard, R. P., Kroese, F. G., Vissink, A., Kallenberg, C. G., Spijkervet, F. K., Bootsma, H., Michie, S. A., Gorr, S. U., Peck, A. B., Cai, C., Zhou, et al  
2012; 14 (6)
- **Systems analysis of primary Sjogren's syndrome pathogenesis in salivary glands identifies shared pathways in human and a mouse model.** *Arthritis research & therapy*  
Horvath, S., Nazmul-Hossain, A. N., Pollard, R. P., Kroese, F. G., Vissink, A., Kallenberg, C. G., Spijkervet, F. K., Bootsma, H., Michie, S. A., Gorr, S. U., Peck, A. B., Cai, C., Zhou, et al  
2012; 14 (6): R238-?
- **The immunoglobulin heavy chain gene 3' enhancers induce Bcl2 deregulation and lymphomagenesis in murine B cells** *LEUKEMIA*  
Xiang, H., Noonan, E. J., Wang, J., Duan, H., Ma, L., Michie, S., Boxer, L. M.  
2011; 25 (9): 1484-1493
- **alpha(4)beta(7) integrin/MAdCAM-1 adhesion pathway is crucial for B cell migration into pancreatic lymph nodes in nonobese diabetic mice** *JOURNAL OF AUTOIMMUNITY*  
Xu, B., Cook, R. E., Michie, S. A.  
2010; 35 (2): 124-129

- **Removal of *Toxoplasma gondii* Cysts from the Brain by Perforin-Mediated Activity of CD8(+) T Cells** *AMERICAN JOURNAL OF PATHOLOGY*  
Suzuki, Y., Wang, X., Jortner, B. S., Payne, L., Ni, Y., Michie, S. A., Xu, B., Kudo, T., Perkins, S.  
2010; 176 (4): 1607-1613
- **Removal of *Toxoplasma gondii* cysts from the brain by perforin-mediated activity of CD8+T cells**  
Suzuki, Y., Wang, X., Jortner, B., Payne, L., Ni, Y., Michie, S., Xu, B., Kudo, T., Perkins, S.  
AMER ASSOC IMMUNOLOGISTS.2010
- **PPAR-delta senses and orchestrates clearance of apoptotic cells to promote tolerance** *NATURE MEDICINE*  
Mukundan, L., Odegaard, J. I., Morel, C. R., Heredia, J. E., Mwangi, J. W., Ricardo-Gonzalez, R. R., Goh, Y. P., Eagle, A. R., Dunn, S. E., Awakuni, J. U., Nguyen, K. D., Steinman, L., Michie, et al  
2009; 15 (11): 1266-U59
- **Expression of endothelia and lymphocyte adhesion molecules in bronchus-associated lymphoid tissue (BALT) in adult human lung** *RESPIRATORY RESEARCH*  
Kawamata, N., Xu, B., Nishijima, H., Aoyama, K., Kusumoto, M., Takeuchi, T., Tei, C., Michie, S. A., Matsuyama, T.  
2009; 10
- **Targeting tumor-associated macrophages in an experimental glioma model with a recombinant immunotoxin to folate receptor beta** *CANCER IMMUNOLOGY IMMUNOTHERAPY*  
Nagai, T., Tanaka, M., Tsuneyoshi, Y., Xu, B., Michie, S. A., Hasui, K., Hirano, H., Arita, K., Matsuyama, T.  
2009; 58 (10): 1577-1586
- **Systems Biology Analysis of Sjogren's Syndrome and Mucosa-Associated Lymphoid Tissue Lymphoma in Parotid Glands** *ARTHRITIS AND RHEUMATISM*  
Hu, S., Zhou, M., Jiang, J., Wang, J., Elashoff, D., Gorr, S., Michie, S. A., Spijkervet, F. K., Bootsma, H., Kallenberg, C. G., Vissink, A., Horvath, S., Wong, et al  
2009; 60 (1): 81-92
- **TSG-6 protein expression in the pancreatic islets of NOD mice** *JOURNAL OF MOLECULAR HISTOLOGY*  
Kvezereli, M., Michie, S. A., Yu, T., Creusot, R. J., Fontaine, M. J.  
2008; 39 (6): 585-593
- **Interferon-alpha initiates type 1 diabetes in nonobese diabetic mice** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Li, Q., Xu, B., Michie, S. A., Rubins, K. H., Schreiber, R. D., McDevitt, H. O.  
2008; 105 (34): 12439-12444
- **Keratin overexpression levels correlate with the extent of spontaneous pancreatic injury** *AMERICAN JOURNAL OF PATHOLOGY*  
Toivola, D. M., Nakamichi, I., Strnad, P., Michie, S. A., Ghori, N., Harada, M., Zeh, K., Oshima, R. G., Baribault, H., Omary, M. B.  
2008; 172 (4): 882-892
- **The LFA-1 and ICAM-1 adhesion pathway mediates the homeostatic migration of lymphocytes from peripheral tissues through lymphatic vessels into lymph nodes**  
Xu, B., Xu, Z., Cook, R. E., Michie, S. A.  
FEDERATION AMER SOC EXP BIOL.2008
- **Lack of lymphoid chemokines CCL19 and CCL21 enhances allergic airway inflammation in mice** *INTERNATIONAL IMMUNOLOGY*  
Xu, B., Aoyama, K., Kusumoto, M., Matsuzawa, A., Butcher, E. C., Michie, S. A., Matsuyama, T., Takeuchi, T.  
2007; 19 (6): 775-784
- **Importance of IFN-gamma-mediated expression of endothelial VCAM-1 on recruitment of CD8(+) T cells into the brain during chronic infection with *Toxoplasma gondii*** *JOURNAL OF INTERFERON AND CYTOKINE RESEARCH*  
Wang, X., Michie, S. A., Xu, B., Suzuki, Y.  
2007; 27 (4): 329-338
- **Regulation of hormone-sensitive lipase in islets** *DIABETES RESEARCH AND CLINICAL PRACTICE*  
Shen, W., Liang, Y., Wang, J., Harada, K., Patel, S., Michie, S. A., Osuga, J., Ishibashi, S., Kraemer, F. B.  
2007; 75 (1): 14-26

- **Contact sensitizer potassium dichromate alters lymphocyte populations in draining lymph nodes and blood in mice** *TOXICOLOGY MECHANISMS AND METHODS*  
Aoyama, K., Xu, B., Xu, B., Cook, R. E., Kusumoto, M., Shi, M., Michie, S. A., Takeuchi, T.  
2007; 17 (8): 475-481
- **Protein phosphatase-2A associates with and dephosphorylates keratin 8 after hyposmotic stress in a site- and cell-specific manner** *JOURNAL OF CELL SCIENCE*  
Tao, G. Z., Toivola, D. M., Zhou, Q., Strnad, P., Xu, B. H., Michie, S. A., Omary, M. B.  
2006; 119 (7): 1425-1432
- **Keratin 8 overexpression promotes mouse Mallory body formation** *JOURNAL OF CELL BIOLOGY*  
Nakamichi, I., Toivola, D. M., Strnad, P., Michie, S. A., Oshima, R. G., Baribault, H., Omary, M. B.  
2005; 171 (6): 931-937
- **The role of TNF-alpha in the pathogenesis of type 1 diabetes in the nonobese diabetic mouse: Analysis of dendritic cell maturation** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Lee, L. F., Xu, B. H., Michie, S. A., Beilhack, G. F., Warganich, T., Turley, S., McDevitt, H. O.  
2005; 102 (44): 15995-16000
- **Absence of the major zymogen granule membrane protein, GP2, does not affect pancreatic morphology or secretion** *JOURNAL OF BIOLOGICAL CHEMISTRY*  
Yu, S., Michie, S. A., Lowe, A. W.  
2004; 279 (48): 50274-50279
- **Keratin 8 and 18 overexpression is not a prerequisite for Mallory body formation and pancreatic injury**  
Nakamichi, Toivola, D. M., Michie, S. A., Baribault, H., Oshima, R. G., Omary, M. B.  
AMER SOC CELL BIOLOGY.2004: 172A
- **Oxidative damages in chronic inflammation of a mouse autoimmune disease model** *IMMUNOLOGY LETTERS*  
Shi, M., Xu, B. H., Wang, X., Aoyama, K., Michie, S. A., Takeuchi, T.  
2004; 95 (2): 233-236
- **Keratin-8 null mice have different gallbladder and liver susceptibility to lithogenic diet-induced injury** *JOURNAL OF CELL SCIENCE*  
Tao, G. Z., Toivola, D. M., Zhong, B. H., Michie, S. A., Resurreccion, E. Z., Tamai, Y., Taketo, M. M., Omary, M. B.  
2003; 116 (22): 4629-4638
- **Lymphocyte homing to bronchus-associated lymphoid tissue (BALT) is mediated by L-selectin/PNAd, alpha(4)beta(1) integrin/VCAM-1, and LFA-1 adhesion pathways** *JOURNAL OF EXPERIMENTAL MEDICINE*  
Xu, B. H., Wagner, N., Pham, L. N., Magno, V., Shan, Z. Y., BUTCHER, E. C., Michie, S. A.  
2003; 197 (10): 1255-1267
- **High-quality RNA from cells isolated by laser capture microdissection** *BIOTECHNIQUES*  
Mikulowska-Mennis, A., Taylor, T. B., Vishnu, P., Michie, S. A., Raja, R., Horner, N., Kunitake, S. T.  
2002; 33 (1): 176-179
- **Engagement of the lymphotoxin-beta receptor is required for development of diabetes in non-obese diabetic mice.**  
Munson-Voskuil, S., Ettinger, R., Sanna, M., Michie, S., Vadeboncoeur, M., Toma, J., McDevitt, H.  
ACADEMIC PRESS INC ELSEVIER SCIENCE.2002: S64
- **Keratin binding to 14-3-3 proteins modulates keratin filaments and hepatocyte mitotic progression** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Ku, N. O., Michie, S., Resurreccion, E. Z., Broome, R. L., Omary, M. B.  
2002; 99 (7): 4373-4378
- **Lymphocyte migration to is mediated by vascular inflamed lacrimal glands cell adhesion molecule-1/alpha(4)beta(1) integrin, peripheral node addressin/L-selectin, and lymphocyte function-associated antigen-1 adhesion pathways** *AMERICAN JOURNAL OF PATHOLOGY*  
Mikulowska-Mennis, A., Xu, B. H., Berberian, J. M., Michie, S. A.  
2001; 159 (2): 671-681
- **Inhibition of 14-3-3 binding to keratins alters mitotic progression and protects from hepatotoxic injury**  
Ku, N. O., Resurreccion, E. Z., Broome, R. L., Michie, S. A., Omary, M. B.

W B SAUNDERS CO.2001: A28

- **Simple epithelial keratins are dispensable for cytoprotection in two pancreatitis models** *AMERICAN JOURNAL OF PHYSIOLOGY-GASTROINTESTINAL AND LIVER PHYSIOLOGY*  
Toivola, D. M., Baribault, H., Magin, T., Michie, S. A., Omary, M. B.  
2000; 279 (6): G1343-G1354
- **Effects of keratin filament disruption on exocrine pancreas-stimulated secretion and susceptibility to injury** *EXPERIMENTAL CELL RESEARCH*  
Toivola, D. M., Ku, N. O., Ghorri, N., Lowe, A. W., Michie, S. A., Omary, M. B.  
2000; 255 (2): 156-170
- **HLA class II transgenic mice: models of the human CD4(+) T-cell immune response** *IMMUNOLOGICAL REVIEWS*  
Sonderstrup, G., Cope, A. P., Patel, S., Congia, M., Hain, N., Hall, F. C., Parry, S. L., Fugger, L. H., Michie, S., McDevitt, H. O.  
1999; 172: 335-343
- **Anti-CD43 monoclonal antibody L11 flocks migration of T cells to inflamed pancreatic islets and prevents development of diabetes in nonobese diabetic mice** *JOURNAL OF IMMUNOLOGY*  
Johnson, G. G., MIKULOWSKA, A., BUTCHER, E. C., McEvoy, L. M., Michie, S. A.  
1999; 163 (10): 5678-5685
- **L11, a unique anti-CD43 monoclonal antibody, inhibits the adoptive transfer of diabetes and pancreatic islet, salivary gland, and lacrimal gland inflammation in NOD scid mice** *CELLULAR IMMUNOLOGY*  
MIKULOWSKA, A., Johnson, G. G., Berberian, J. M., BUTCHER, E. C., McEvoy, L. M., Michie, S. A.  
1999; 194 (1): 112-117
- **Mutation of a major keratin phosphorylation site predisposes to hepatotoxic injury in transgenic mice** *JOURNAL OF CELL BIOLOGY*  
Ku, N. O., Michie, S. A., Soetikno, R. M., Resurreccion, E. Z., Broome, R. L., Omary, M. B.  
1998; 143 (7): 2023-2032
- **Effect of keratin filament disruption on exocrine pancreas-stimulated secretion and susceptibility to injury.**  
Toivola, D. M., Michie, S. A., Ku, N. O., Omary, M. B.  
AMER SOC CELL BIOLOGY.1998: 164A
- **Effects of tumor necrosis factor and lymphotoxin on peripheral lymphoid tissue development** *INTERNATIONAL IMMUNOLOGY*  
Ettinger, R., Mebius, R., Browning, J. L., Michie, S. A., van Tuijl, S., Kraal, G., van Ewijk, W., McDevitt, H. O.  
1998; 10 (6): 727-741
- **Hepatocyte cytoskeletal keratin binding to 14-3-3 proteins and 14-3-3 regulation of phosphokeratin organization during mitosis**  
Ku, N. O., Liao, J., Omary, M. B.  
W B SAUNDERS CO.1998: A1280
- **Cytoskeletal intermediate filament protein phosphorylation provides a protective physiologic role against liver injury**  
Ku, N. O., Michie, S. A., Resurreccion, E. Z., Omary, M. B.  
W B SAUNDERS CO.1998: A1280
- **Adhesion molecule phenotype of T lymphocytes in inflamed CNS** *JOURNAL OF NEUROIMMUNOLOGY*  
Engelhardt, B., Martin-Simonet, M. T., Rott, L. S., BUTCHER, E. C., Michie, S. A.  
1998; 84 (1): 92-104
- **The roles of alpha 4-integrins in the development of insulin-dependent diabetes mellitus** *LEUKOCYTE INTEGRINS IN THE IMMUNE SYSTEM AND MALIGNANT DISEASE*  
Michie, S. A., Sytwu, H. K., McDevitt, J. O., Yang, X. D.  
1998; 231: 65-83
- **Involvement of beta(7) integrin and mucosal addressin cell adhesion molecule-1 (MAdCAM-1) in the development of diabetes in nonobese diabetic mice** *DIABETES*  
Yang, X. D., Sytwu, H. K., McDevitt, H. O., Michie, S. A.  
1997; 46 (10): 1542-1547
- **Disrupted splenic architecture, but normal lymph node development in mice expressing a soluble lymphotoxin-beta receptor-IgG1 fusion protein** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*

- Ettinger, R., Browning, J. L., Michie, S. A., VANEWIJK, W., McDevitt, H. O.  
1996; 93 (23): 13102-13107
- **A developmental switch in lymphocyte homing receptor and endothelial vascular addressin expression regulates lymphocyte homing and permits CD4+CD3- cells to colonize lymph nodes** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Mebius, R. E., STREETER, P. R., Michie, S., BUTCHER, E. C., Weissman, I. L.  
1996; 93 (20): 11019-11024
  - **Susceptibility to Hepatotoxicity in transgenic mice that express a dominant-negative human keratin 18 mutant** *JOURNAL OF CLINICAL INVESTIGATION*  
Ku, N. O., Michie, S. A., Soetikno, R. M., Resurreccion, E. Z., Broome, R. L., Oshima, R. G., Omary, M. B.  
1996; 98 (4): 1034-1046
  - **The role of cell adhesion molecules in the development of IDDM - Implications for pathogenesis and therapy** *DIABETES*  
Yang, X. D., Michie, S. A., Mebius, R. E., Tisch, R., Weissman, I., McDevitt, H. O.  
1996; 45 (6): 705-710
  - **Increased susceptibility to hepatotoxicity in transgenic mice expressing a dominant-negative human keratin 18 mutant.**  
Ku, N. O., Michie, S., Soetikno, R., Oshima, R. G., Omary, M. B.  
W B SAUNDERS CO-ELSEVIER INC.1996: A1241
  - **CHRONIC HEPATITIS, HEPATOCYTE FRAGILITY, AND INCREASED SOLUBLE PHOSPHOGLYCOKERATINS IN TRANSGENIC MICE EXPRESSING A KERATIN-18 CONSERVED ARGININE MUTANT** *JOURNAL OF CELL BIOLOGY*  
Ku, N. O., Michie, S., Oshima, R. G., Omary, M. B.  
1995; 131 (5): 1303-1314
  - **L-SELECTIN AND ALPHA(4)BETA(7) INTEGRIN HOMING RECEPTOR PATHWAYS MEDIATE PERIPHERAL LYMPHOCYTE TRAFFIC TO AKR MOUSE HYPERPLASTIC THYMUS** *AMERICAN JOURNAL OF PATHOLOGY*  
Michie, S. A., STREETER, P. R., BUTCHER, E. C., Rouse, R. V.  
1995; 147 (2): 412-421
  - **EXPRESSION OF BCL-2 PROTEIN AND KI-67 NUCLEAR PROLIFERATION ANTIGEN IN BENIGN AND MALIGNANT CUTANEOUS T-CELL INFILTRATES** *JOURNAL OF CUTANEOUS PATHOLOGY*  
Dummer, R., Michie, S. A., Kell, D., Gould, J. W., Haeffner, A. C., SMOLLER, B. R., Warnke, R. A., Wood, G. S.  
1995; 22 (1): 11-17
  - **A PREDOMINANT ROLE OF INTEGRIN ALPHA(4) IN THE SPONTANEOUS DEVELOPMENT OF AUTOIMMUNE DIABETES IN NONOBESSE DIABETIC MICE** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Yang, X. D., Michie, S. A., Tisch, R., Karin, N., Steinman, L., McDevitt, H. O.  
1994; 91 (26): 12604-12608
  - **CELL-ADHESION MOLECULES - A SELECTIVE THERAPEUTIC TARGET FOR ALLEVIATION OF IDDM** *13th Immunology of Diabetes Workshop*  
Yang, X. D., Michie, S. A., Tisch, R., Karin, N., Steinman, L., McDevitt, H. O.  
ACADEMIC PRESS LTD.1994: 859-64
  - **EXPRESSION OF HLA-DR4 AND HUMAN CD4 TRANSGENES IN MICE DETERMINES THE VARIABLE REGION BETA-CHAIN T-CELL REPERTOIRE AND MEDIATES AN HLA-DR-RESTRICTED IMMUNE-RESPONSE** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Fugger, L., Michie, S. A., Rulifson, I., Lock, C. B., McDevitt, G. S.  
1994; 91 (13): 6151-6155
  - **EXPRESSION OF CLASS-II MAJOR HISTOCOMPATIBILITY ANTIGENS BY KERATINOCYTES IN CUTANEOUS T-CELL LYMPHOMA** *INTERNATIONAL JOURNAL OF DERMATOLOGY*  
Wood, G. S., Michie, S. A., Durden, F., Hoppe, R. T., Warnke, R. A.  
1994; 33 (5): 346-350
  - **THE HUMAN PERIPHERAL LYMPH-NODE VASCULAR ADDRESSIN - AN INDUCIBLE ENDOTHELIAL ANTIGEN INVOLVED IN LYMPHOCYTE HOMING** *AMERICAN JOURNAL OF PATHOLOGY*  
Michie, S. A., STREETER, P. R., BOLT, P. A., BUTCHER, E. C., Picker, L. J.  
1993; 143 (6): 1688-1698

- **VASCULAR ADDRESSINS ARE INDUCED ON ISLET VESSELS DURING INSULITIS IN NONOBESE DIABETIC MICE AND ARE INVOLVED IN LYMPHOID-CELL BINDING TO ISLET ENDOTHELIUM** *JOURNAL OF CLINICAL INVESTIGATION*  
Hanninen, A., TAYLOR, C., STREETER, P. R., Stark, L. S., SARTE, J. M., Shizuru, J. A., Simell, O., Michie, S. A.  
1993; 92 (5): 2509-2515
- **L-SELECTIN MEDIATES NEUTROPHIL ROLLING IN INFLAMED VENULES THROUGH SIALYL LEWIS(X)-DEPENDENT AND LEWIS(X)-INDEPENDENT RECOGNITION PATHWAYS** *BLOOD*  
VONANDRIAN, U. H., Chambers, J. D., BERG, E. L., Michie, S. A., Brown, D. A., KAROLAK, D., Ramezani, L., Berger, E. M., Arfors, K. E., BUTCHER, E. C.  
1993; 82 (1): 182-191
- **BIDIRECTIONAL RECEPTOR-LIGAND RECOGNITION PATHWAYS MEDIATE NEUTROPHIL ROLLING INVIVO**  
VONANDRIAN, U. H., BERG, E. L., MICHIE, S. A., ARFORS, K. E., BUTCHER, E. C.  
FEDERATION AMER SOC EXP BIOL.1993: A269
- **EFFECTS OF FISH OIL ON GRAFT ARTERIOSCLEROSIS AND MHC CLASS-II ANTIGEN EXPRESSION IN RAT HETEROTOPIC CARDIAC ALLOGRAFTS** *JOURNAL OF HEART AND LUNG TRANSPLANTATION*  
Yun, K. L., Michie, S. A., Fann, J. I., Billingham, M. E., Miller, D. C.  
1991; 10 (6): 1004-1111
- **TRAFFIC OF PERIPHERAL LYMPHOCYTE-B AND LYMPHOCYTE-T TO HYPERPLASTIC, PRENEOPLASTIC THYMUSES OF AKR MICE** *AMERICAN JOURNAL OF PATHOLOGY*  
Michie, S. A., Rouse, R. V.  
1991; 138 (4): 1015-1025
- **DISCORDANT EXPRESSION OF ANTIGENS BETWEEN INTRAEPIDERMAL AND INTRADERMAL T-CELLS IN MYCOSIS-FUNGOIDES** *AMERICAN JOURNAL OF PATHOLOGY*  
Michie, S. A., Abel, E. A., Hoppe, R. T., Warnke, R. A., Wood, G. S.  
1990; 137 (6): 1447-1451
- **LYMPHOKINES IN AUTOIMMUNITY - THE NONOBESE DIABETIC (NOD) MODEL SYSTEM**  
JACOB, C. O., AISO, S., SCHREIBER, R. D., MICHIE, S. A., MCDEVITT, H. O.  
MARY ANN LIEBERT INC PUBL.1990: 593
- **IMMUNE-DEFICIENCY DUE TO HIGH COPY NUMBERS OF AN A BETA-KAPPA-TRANSGENE** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Gilfillan, S., AISO, S., Michie, S. A., McDevitt, H. O.  
1990; 87 (18): 7319-7323
- **THE EFFECT OF EXCESS BETA-CHAIN SYNTHESIS ON CELL-SURFACE EXPRESSION OF ALLELE-MISMATCHED CLASS-II HETERODIMERS INVIVO** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Gilfillan, S., AISO, S., Michie, S. A., McDevitt, H. O.  
1990; 87 (18): 7314-7318
- **A UNIQUE PHENOTYPE OF SKIN-ASSOCIATED LYMPHOCYTES IN HUMANS - PREFERENTIAL EXPRESSION OF THE HECA-452 EPITOPE BY BENIGN AND MALIGNANT T-CELLS AT CUTANEOUS SITES** *AMERICAN JOURNAL OF PATHOLOGY*  
Picker, L. J., Michie, S. A., Rott, L. S., BUTCHER, E. C.  
1990; 136 (5): 1053-1068
- **PREVENTION OF DIABETES IN NONOBESE DIABETIC MICE BY TUMOR NECROSIS FACTOR (TNF) - SIMILARITIES BETWEEN TNF-ALPHA AND INTERLEUKIN-1** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Jacob, C. O., AISO, S., Michie, S. A., McDevitt, H. O., ACHAORBEA, H.  
1990; 87 (3): 968-972
- **INHIBITION OF ADOPTIVE TRANSFER AND DEVELOPMENT OF SPONTANEOUS DIABETES-MELLITUS IN NONOBESE DIABETIC MICE BY TNF-ALPHA** *2ND INTERNATIONAL CONF ON TUMOR NECROSIS FACTOR AND RELATED CYTOKINES*  
Jacob, C. O., AISO, S., Michie, S. A., McDevitt, H. O., ACHAORBEA, H.  
KARGER.1990: 222-227
- **THE EFFECT OF COPY NUMBER ON MESSENGER-RNA AND CELL-SURFACE EXPRESSION OF AN A-BETA-K TRANSGENE** *INTERNATIONAL CONF ON TRANSGENIC MICE AND MUTANTS IN MHC RESEARCH*

- Gilfillan, S., AISO, S., Michie, S. A., McDevitt, H. O.  
SPRINGER-VERLAG BERLIN.1990: 143–154
- **LYMPHOMAS PRESENTING AS HISTOLOGICALLY UNCLASSIFIED NEOPLASMS - CHARACTERISTICS AND RESPONSE TO TREATMENT** *JOURNAL OF CLINICAL ONCOLOGY*  
Horning, S. J., CARRIER, E. K., Rouse, R. V., Warnke, R. A., Michie, S. A.  
1989; 7 (9): 1281-1287
  - **EXPRESSION OF T-CELL RECEPTOR ANTIGENS IN MYCOSIS-FUNGOIDES AND INFLAMMATORY SKIN-LESIONS** *JOURNAL OF INVESTIGATIVE DERMATOLOGY*  
Michie, S. A., Abel, E. A., Hoppe, R. T., Warnke, R. A., Wood, G. S.  
1989; 93 (1): 116-120
  - **TRAFFIC OF MATURE LYMPHOCYTES INTO THE MOUSE THYMUS** *WORKSHOP ON THE THYMUS : HISTOPHYSIOLOGY AND DYNAMICS IN THE IMMUNE SYSTEM*  
Michie, S. A., Rouse, R. V.  
KLUWER ACADEMIC PUBL.1989: 141–48
  - **RARE PERIPHERAL T-CELLS MIGRATE TO AND PERSIST IN NORMAL MOUSE THYMUS** *JOURNAL OF EXPERIMENTAL MEDICINE*  
Michie, S. A., KIRKPATRICK, E. A., Rouse, R. V.  
1988; 168 (5): 1929-1934
  - **EXPRESSION OF T-CELL RECEPTOR-DELTA CHAINS IN BENIGN AND MALIGNANT T-LINEAGE LYMPHOPROLIFERATIONS** *AMERICAN JOURNAL OF PATHOLOGY*  
Picker, L. J., Brenner, M. B., Michie, S., Warnke, R. A.  
1988; 132 (3): 401-405
  - **AN IMMUNOPEROXIDASE STUDY OF RENAL-CELL CARCINOMAS - CORRELATION WITH NUCLEAR GRADE, CELL TYPE, AND HISTOLOGIC PATTERN** *HUMAN PATHOLOGY*  
Medeiros, L. J., Michie, S. A., Johnson, D. E., Warnke, R. A., Weiss, L. M.  
1988; 19 (8): 980-987
  - **STUDY OF MURINE T-CELL MIGRATION USING THE THY-1 ALLOTYPIC MARKER - DEMONSTRATION OF ANTIGEN-SPECIFIC HOMING TO LYMPH-NODE GERMINAL-CENTERS** *TRANSPLANTATION*  
Michie, S. A., Rouse, R. V.  
1988; 46 (1): 98-104
  - **EXPRESSION OF TAC ANTIGEN BY NON-HODGKINS-LYMPHOMAS** *AMERICAN JOURNAL OF CLINICAL PATHOLOGY*  
Weiss, L. M., Michie, S. A., Medeiros, L. J., Strickler, J. G., Garcia, C. F., Warnke, R. A.  
1987; 88 (4): 483-485
  - **EXPRESSION OF THE LEU-8 ANTIGEN BY B-CELL LYMPHOMAS** *AMERICAN JOURNAL OF CLINICAL PATHOLOGY*  
Michie, S. A., Garcia, C. F., Strickler, J. G., Dailey, M. O., Rouse, R. V., Warnke, R. A.  
1987; 88 (4): 486-490
  - **A PANEL APPROACH TO THE EVALUATION OF THE SENSITIVITY AND SPECIFICITY OF ANTIBODIES FOR THE DIAGNOSIS OF ROUTINELY PROCESSED HISTOLOGICALLY UNDIFFERENTIATED HUMAN NEOPLASMS** *AMERICAN JOURNAL OF CLINICAL PATHOLOGY*  
Michie, S. A., Spagnolo, D. V., Dunn, K. A., Warnke, R. A., Rouse, R. V.  
1987; 88 (4): 457-462
  - **THE SYNCYTIAL VARIANT OF NODULAR SCLEROSING HODGKINS-DISEASE** *AMERICAN JOURNAL OF SURGICAL PATHOLOGY*  
Strickler, J. G., Michie, S. A., Warnke, R. A., Dorfman, R. F.  
1986; 10 (7): 470-477
  - **THE SYNCYTIAL VARIANT OF NODULAR SCLEROSING HODGKINS-DISEASE**  
STRICKLER, J. G., MICHIE, S. A., WARNKE, R. A., DORFMAN, R. F.  
WILLIAMS & WILKINS.1986: A61
  - **MONOCLONAL ANTI-KERATIN (AE1) REACTIVITY IN ROUTINELY PROCESSED TISSUE FROM 166 HUMAN NEOPLASMS** *AMERICAN JOURNAL OF CLINICAL PATHOLOGY*  
Spagnolo, D. V., Michie, S. A., CRABTREE, G. S., Warnke, R. A., Rouse, R. V.

1985; 84 (6): 697-704

- **INVIVO PREVENTION OF THYROID AND PANCREATIC AUTOIMMUNITY IN THE BB RAT BY ANTIBODY TO CLASS-II MAJOR HISTOCOMPATIBILITY COMPLEX GENE-PRODUCTS** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*

Boitard, C., Michie, S., SERRURIER, P., Butcher, G. W., Larkins, A. P., McDevitt, H. O.  
1985; 82 (19): 6627-6631

- **THE BEHAVIOR OF GFAP FRACTIONS WITH INSITU POSTMORTEM AUTOLYSIS OF MOUSE SPINAL-CORD**

MICHIE, S., DEARMOND, S. J.  
AMER ASSN NEUROPATHOLOGISTS INC.1984: 311