

# Stanford

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## Eugene Butcher

Klaus Bensch Professor of Pathology

### CONTACT INFORMATION

- **Alternate Contact**

Lourdes Magalhaes - Program Administrator

**Email** lourdesm@stanford.edu

**Tel** 650-496-2599

### Bio

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### ACADEMIC APPOINTMENTS

- Professor, Pathology
- Member, Bio-X
- Member, Cardiovascular Institute
- Member, Stanford Cancer Institute
- Member, Wu Tsai Neurosciences Institute

### LINKS

- Butcher Lab Home Page: <http://butcherlab.stanford.edu/>

### Research & Scholarship

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### CURRENT RESEARCH AND SCHOLARLY INTERESTS

We study the trafficking of white blood cells (lymphocytes, dendritic cells, monocytes, etc.), including their interactions with the endothelial lining of blood vessels at sites of leukocyte extravasation, and their chemotactic responses in tissues. These events regulate immune responses by controlling the access of leukocytes to sites of inflammatory or immune reaction in the body. We identified an array of adhesion molecules or "homing receptors" that lymphocytes use to recognize organ (and/or inflammation)-specific vascular ligands or "addressins". The vascular addressins and adhesion receptors control immune cell recruitment, and thus local immune and inflammatory responses. We showed that adhesion receptors act coordinately with G protein-linked chemoattractant receptors in a multi-step process that controls the specificity and provides combinatorial diversity in leukocyte trafficking.

A major focus of the group is on understanding the programming of targeted immune cell trafficking in homeostasis, in the immune response and in disease models (colitis, psoriasis, EAE, cancer). Genetic, antibody and small molecule-based approaches allow us to discover and define the mechanisms involved. Since blood cell interactions with the vasculature control recruitment, we are applying state-of-the art single cell (transcriptomic and mass cytometric) profiling of endothelial cells as well as immune cells to uncover the origin (stem or progenitor cells) and differentiation of leukocyte-recruiting endothelium, and the mechanisms of vascular and immune cell 'imprinting'. The studies have fundamental implications for the therapeutic regulation of immune responses.

## Teaching

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### STANFORD ADVISEES

#### Postdoctoral Faculty Sponsor

Yuhan Bi, Tanya Sharma, Menglan Xiang

#### Doctoral Dissertation Advisor (AC)

Mohammed Gaafarelkhalifa

### GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Cancer Biology (Phd Program)
- Cardiovascular Medicine (Fellowship Program)
- Immunology (Phd Program)
- Microbiology and Immunology (Phd Program)

## Publications

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### PUBLICATIONS

- Single-Cell Analysis of Blood-Brain Barrier Response to Pericyte Loss. *Circulation research*  
Andaloussi Mae, M., He, L., Nordling, S., Vazquez-Liebanas, E., Nahar, K., Jung, B., Li, X., Tan, B. C., Foo, J. C., Cazenave Gassiot, A., Wenk, M., Zarb, Y., Lavina, et al  
2020
- Retinoic Acid Promotes Endothelial Cell Cycle Early G1 State to Enable Human Hemogenic Endothelial Cell Specification. *Cell reports*  
Qiu, J., Nordling, S., Vasavada, H. H., Butcher, E. C., Hirschi, K. K.  
2020; 33 (9): 108465
- Endothelial HIF-2alpha as a Key Endogenous Mediator Preventing Emphysema. *American journal of respiratory and critical care medicine*  
Pasupneti, S., Tian, W., Tu, A. B., Dahms, P., Granucci, E., Gandjeva, A., Xiang, M., Butcher, E., Semenza, G. L., Tuder, R., Jiang, X., Nicolls, M. R.  
2020
- Neutrophils Recirculate through Lymph Nodes to Survey Tissues for Pathogens. *Journal of immunology (Baltimore, Md. : 1950)*  
Bogoslawski, A., Wijeyesinghe, S., Lee, W., Chen, C., Alanani, S., Jenne, C., Steeber, D. A., Scheiermann, C., Butcher, E. C., Masopust, D., Kubes, P.  
2020
- A molecular map of murine lymph node blood vascular endothelium at single cell resolution. *Nature communications*  
Brulais, K. n., Rajaraman, A. n., Szade, A. n., Nordling, S. n., Bogoslawski, A. n., Dermadi, D. n., Rahman, M. n., Kiefel, H. n., O'Hara, E. n., Koning, J. J., Kawashima, H. n., Zhou, B. n., Vestweber, et al  
2020; 11 (1): 3798
- A Single-Cell Transcriptional Roadmap of the Mouse and Human Lymph Node Lymphatic Vasculature. *Frontiers in cardiovascular medicine*  
Xiang, M., Gross, R. A., Takeda, A., Pan, J., Bekkhus, T., Brulais, K., Dermadi, D., Nordling, S., Vanlandewijck, M., Jalkanen, S., Ulvmar, M. H., Butcher, E. C.  
2020; 7: 52
- Retinoic Acid and Lymphotoxin Signaling Promote Differentiation of Human Intestinal M Cells. *Gastroenterology*  
Ding, S. n., Song, Y. n., Brulais, K. F., Pan, J. n., Co, J. Y., Ren, L. n., Feng, N. n., Yasukawa, L. L., Sánchez-Tacuba, L. n., Wosen, J. E., Mellins, E. D., Monack, D. M., Amieva, et al  
2020
- Exploration of Cell Development Pathways through High-Dimensional Single Cell Analysis in Trajectory Space. *iScience*  
Dermadi, D. n., Bscheider, M. n., Bjegovic, K. n., Lazarus, N. H., Szade, A. n., Hadeiba, H. n., Butcher, E. C.  
2020; 23 (2): 100842
- Single-Cell Survey of Human Lymphatics Unveils Marked Endothelial Cell Heterogeneity and Mechanisms of Homing for Neutrophils. *Immunity*

Takeda, A., Hollmen, M., Dermadi, D., Pan, J., Brulois, K. F., Kaukonen, R., Lonnberg, T., Bostrom, P., Koskivuo, I., Irjala, H., Miyasaka, M., Salmi, M., Butcher, et al  
2019

- **Aged blood impairs hippocampal neural precursor activity and activates microglia via brain endothelial cell VCAM1** *NATURE MEDICINE*  
Yousef, H., Czupalla, C. J., Lee, D., Chen, M. B., Burke, A. N., Zera, K. A., Zandstra, J., Berber, E., Lehallier, B., Mathur, V., Nair, R. V., Bonanno, L. N., Yang, et al  
2019; 25 (6): 988-+
- **Chemerin Suppresses Breast Cancer Growth by Recruiting Immune Effector Cells Into the Tumor Microenvironment** *FRONTIERS IN IMMUNOLOGY*  
Pachynski, R. K., Wang, P., Salazar, N., Zheng, Y., Nease, L., Rosalez, J., Leong, W., Virdi, G., Rennier, K., Shin, W., Viet Nguyen, Butcher, E. C., Zabel, B. A.  
2019; 10
- **Chemerin Suppresses Breast Cancer Growth by Recruiting Immune Effector Cells Into the Tumor Microenvironment.** *Frontiers in immunology*  
Pachynski, R. K., Wang, P., Salazar, N., Zheng, Y., Nease, L., Rosalez, J., Leong, W. I., Virdi, G., Rennier, K., Shin, W. J., Nguyen, V., Butcher, E. C., Zabel, et al  
2019; 10: 983
- **DGAT1 inhibits retinol-dependent regulatory T cell formation and mediates autoimmune encephalomyelitis.** *Proceedings of the National Academy of Sciences of the United States of America*  
Graham, K. L., Werner, B. J., Moyer, K. M., Patton, A. K., Krois, C. R., Yoo, H. S., Tverskoy, M., LaJovic, M., Napoli, J. L., Sobel, R. A., Zabel, B. A., Butcher, E. C.  
2019
- **Aged blood impairs hippocampal neural precursor activity and activates microglia via brain endothelial cell VCAM1.** *Nature medicine*  
Yousef, H. n., Czupalla, C. J., Lee, D. n., Chen, M. B., Burke, A. N., Zera, K. A., Zandstra, J. n., Berber, E. n., Lehallier, B. n., Mathur, V. n., Nair, R. V., Bonanno, L. N., Yang, et al  
2019
- **Collagenase-based Single Cell Isolation of Primary Murine Brain Endothelial Cells Using Flow Cytometry.** *Bio-protocol*  
Czupalla, C. J., Yousef, H., Wyss-Coray, T., Butcher, E. C.  
2018; 8 (22)
- **Papain-based Single Cell Isolation of Primary Murine Brain Endothelial Cells Using Flow Cytometry.** *Bio-protocol*  
Yousef, H., Czupalla, C. J., Lee, D., Butcher, E. C., Wyss-Coray, T.  
2018; 8 (22)
- **Papain-based Single Cell Isolation of Primary Murine Brain Endothelial Cells Using Flow Cytometry** *BIO-PROTOCOL*  
Yousef, H., Czupalla, C. J., Lee, D., Butcher, E. C., Wyss-Coray, T.  
2018; 8 (22)
- **Endothelial HIF-2alpha is Required for the Maintenance of Airway Microvasculature.** *Circulation*  
Jiang, X., Tian, W., Tu, A. B., Pasupneti, S., Shuffle, E., Dahms, P., Zhang, P., Cai, H., Dinh, T. T., Liu, B., Cain, C., Giaccia, A. J., Butcher, et al  
2018
- **Gut-Selective Integrin-Targeted Therapies for Inflammatory Bowel Disease** *JOURNAL OF CROHNS & COLITIS*  
Lamb, C. A., O'Byrne, S., Keir, M. E., Butcher, E. C.  
2018; 12: S653–S668
- **A Chimeric Antibody against ACKR3/CXCR7 in Combination with TMZ Activates Immune Responses and Extends Survival in Mouse GBM Models** *MOLECULAR THERAPY*  
Salazar, N., Carlson, J. C., Huang, K., Zheng, Y., Oderup, C., Gross, J., Jang, A. D., Burke, T. M., Lewen, S., Scholz, A., Huang, S., Nease, L., Kosek, et al  
2018; 26 (5): 1354–65
- **Neutrophils recruited through high endothelial venules of the lymph nodes via PNAd intercept disseminating *Staphylococcus aureus*** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Bogoslawski, A., Butcher, E. C., Kubes, P.  
2018; 115 (10): 2449–54
- **Single-cell analysis of early progenitor cells that build coronary arteries.** *Nature*  
Su, T. n., Stanley, G. n., Sinha, R. n., D'Amato, G. n., Das, S. n., Rhee, S. n., Chang, A. H., Poduri, A. n., Raffrey, B. n., Dinh, T. T., Roper, W. A., Li, G. n., Quinn, et al

2018

● **Development of a New Human CD22 transgenic Mouse**

Macaulay, M. S., Bednar, K. J., Shanina, E., Ballet, R., Connors, E. P., Duan, S., Juan, J., Arlian, B. M., Kulic, M. D., Butcher, E. C., Fung-Leung, W., Rao, T. S., Paulson, et al  
OXFORD UNIV PRESS INC.2017: 1249

● **Human CD22 Inhibits Murine B Cell Receptor Activation in a Human CD22 Transgenic Mouse Model.** *Journal of immunology (Baltimore, Md. : 1950)*

Bednar, K. J., Shanina, E., Ballet, R., Connors, E. P., Duan, S., Juan, J., Arlian, B. M., Kulic, M. D., Butcher, E. C., Fung-Leung, W. P., Rao, T. S., Paulson, J. C., Macaulay, et al  
2017; 199 (9): 3116-3128

● **A Mucosal and Cutaneous Chemokine Ligand for the Lymphocyte Chemoattractant Receptor GPR15** *FRONTIERS IN IMMUNOLOGY*

Ocon, B., Pan, J., Dinh, T., Chen, W., Ballet, R., Bscheider, M., Habtezion, A., Tu, H., Zabel, B. A., Butcher, E. C.  
2017; 8: 1111

● **Trafficking receptor signatures define blood plasmablasts responding to tissue-specific immune challenge.** *JCI insight*

Seong, Y., Lazarus, N. H., Sutherland, L., Habtezion, A., Abramson, T., He, X., Greenberg, H. B., Butcher, E. C.  
2017; 2 (6)

● **Patterns of expression of factor VIII and von Willebrand factor by endothelial cell subsets in vivo** *BLOOD*

Pan, J., Dinh, T. T., Rajaraman, A., Lee, M., Scholz, A., Czupalla, C. J., Kiefel, H., Zhu, L., Xia, L., Morser, J., Jiang, H., Santambrogio, L., Butcher, et al  
2016; 128 (1): 104-109

● **Vitamin D immunoregulation through dendritic cells.** *Immunology*

Bscheider, M., Butcher, E. C.  
2016; 148 (3): 227-236

● **Leukocyte Trafficking to the Small Intestine and Colon.** *Gastroenterology*

Habtezion, A., Nguyen, L. P., Hadeiba, H., Butcher, E. C.  
2016; 150 (2): 340-354

● **Generation and transcriptional programming of intestinal dendritic cells: essential role of retinoic acid** *MUCOSAL IMMUNOLOGY*

Zeng, R., Bscheider, M., Lahl, K., Lee, M., Butcher, E. C.  
2016; 9 (1): 183-193

● **Generation and transcriptional programming of intestinal dendritic cells: essential role of retinoic acid.** *Mucosal immunology*

Zeng, R., Bscheider, M., Lahl, K., Lee, M., Butcher, E. C.  
2016; 9 (1): 183-93

● **Role and species-specific expression of colon T cell homing receptor GPR15 in colitis.** *Nature immunology*

Nguyen, L. P., Pan, J., Dinh, T. T., Hadeiba, H., O'Hara, E., Ebtikar, A., Hertweck, A., Gökmen, M. R., Lord, G. M., Jenner, R. G., Butcher, E. C., Habtezion, A.  
2015; 16 (2): 207-213

● **Role and species-specific expression of colon T cell homing receptor GPR15 in colitis** *NATURE IMMUNOLOGY*

Nguyen, L. P., Pan, J., Dinh, T. T., Hadeiba, H., O'Hara, E., Ebtikar, A., Hertweck, A., Goekmen, M. R., Lord, G. M., Jenner, R. G., Butcher, E. C., Habtezion, A.  
2015; 16 (2): 207-?

● **Leukocyte Chemoattractant Receptors in Human Disease Pathogenesis** *ANNUAL REVIEW OF PATHOLOGY: MECHANISMS OF DISEASE, VOL 10*

Zabel, B. A., Rott, A., Butcher, E. C.  
2015; 10: 51-81

● **Evaluation of Tumor-infiltrating Leukocyte Subsets in a Subcutaneous Tumor Model.** *Journal of visualized experiments : JoVE*

Pachynski, R. K., Scholz, A., Monnier, J., Butcher, E. C., Zabel, B. A.  
2015

● **A Novel CMKLR1 Small Molecule Antagonist Suppresses CNS Autoimmune Inflammatory Disease** *PLOS ONE*

Graham, K. L., Zhang, J. V., Lewen, S., Burke, T. M., Dang, T., Zoudilova, M., Sobel, R. A., Butcher, E. C., Zabel, B. A.  
2014; 9 (12)

- **Absence of Nkx2-3 Homeodomain Transcription Factor Reprograms the Endothelial Addressin Preference for Lymphocyte Homing in Peyer's Patches** *JOURNAL OF IMMUNOLOGY*  
Kellermayer, Z., Mihalj, M., Labadi, A., Czoempoly, T., Lee, M., O'Hara, E., Butcher, E. C., Berta, G., Balogh, A., Arnold, H., Balogh, P.  
2014; 193 (10): 5284-5293
- **Absence of Nkx2-3 homeodomain transcription factor reprograms the endothelial addressin preference for lymphocyte homing in Peyer's patches.** *Journal of immunology*  
Kellermayer, Z., Mihalj, M., Lábadi, Á., Czömpöly, T., Lee, M., O'Hara, E., Butcher, E. C., Berta, G., Balogh, A., Arnold, H., Balogh, P.  
2014; 193 (10): 5284-5293
- **Transcriptional programs of lymphoid tissue capillary and high endothelium reveal control mechanisms for lymphocyte homing** *NATURE IMMUNOLOGY*  
Lee, M., Kiefel, H., LaJevic, M. D., Macauley, M. S., O'Hara, E., Pan, J., Paulson, J. C., Butcher, E. C.  
2014; 15 (10): 982-U129
- **Transcriptional programs of lymphoid tissue capillary and high endothelium reveal control mechanisms for lymphocyte homing.** *Nature immunology*  
Lee, M., Kiefel, H., LaJevic, M. D., Macauley, M. S., Kawashima, H., O'Hara, E., Pan, J., Paulson, J. C., Butcher, E. C.  
2014; 15 (10): 982-995
- **Orphan chemoattractant receptor GPR15 mediates dendritic epidermal T-cell recruitment to the skin** *EUROPEAN JOURNAL OF IMMUNOLOGY*  
Lahl, K., Sweere, J., Pan, J., Butcher, E.  
2014; 44 (9): 2577-2581
- **Orphan chemoattractant receptor GPR15 mediates dendritic epidermal T-cell recruitment to the skin.** *European journal of immunology*  
Lahl, K., Sweere, J., Pan, J., Butcher, E.  
2014; 44 (9): 2577-2581
- **Circulating human rotavirus specific CD4 T cells identified with a class II tetramer express the intestinal homing receptors a4β7 and CCR9.** *Virology*  
Parra, M., Herrera, D., Calvo-Calle, J. M., Stern, L. J., Parra-López, C. A., Butcher, E., Franco, M., Angel, J.  
2014; 452-453: 191-201
- **Circulating human rotavirus specific CD4 T cells identified with a class II tetramer express the intestinal homing receptors alpha 4 beta 7 and CCR9** *VIROLOGY*  
Parra, M., Herrera, D., Calvo-Calle, J. M., Stern, L. J., Parra-Lopez, C. A., Butcher, E., Franco, M., Angel, J.  
2014; 452: 191-201
- **Comparative transcriptional and functional profiling defines conserved programs of intestinal DC differentiation in humans and mice** *NATURE IMMUNOLOGY*  
Watchmaker, P. B., Lahl, K., Lee, M., Baumjohann, D., Morton, J., Kim, S. J., Zeng, R., Dent, A., Anse, K. M., Diamond, B., Hadeiba, H., Butcher, E. C.  
2014; 15 (1): 98-108
- **A novel CMKLR1 small molecule antagonist suppresses CNS autoimmune inflammatory disease.** *PloS one*  
Graham, K. L., Zhang, J. V., Lewén, S., Burke, T. M., Dang, T., Zoudilova, M., Sobel, R. A., Butcher, E. C., Zabel, B. A.  
2014; 9 (12)
- **Retinoic acid regulates the development of a gut-homing precursor for intestinal dendritic cells.** *Mucosal immunology*  
Zeng, R., Oderup, C., Yuan, R., Lee, M., Habtezion, A., Hadeiba, H., BUTCHER, E. C.  
2013; 6 (4): 847-856
- **Canonical and noncanonical wnt proteins program dendritic cell responses for tolerance.** *Journal of immunology*  
Oderup, C., LaJevic, M., Butcher, E. C.  
2013; 190 (12): 6126-6134
- **Plasmacytoid dendritic cells promote rotavirus-induced human and murine B cell responses.** *journal of clinical investigation*  
Deal, E. M., Lahl, K., Narváez, C. F., Butcher, E. C., Greenberg, H. B.  
2013; 123 (6): 2464-2474
- **Thymus-homing dendritic cells in central tolerance.** *European journal of immunology*  
Hadeiba, H., Butcher, E. C.  
2013; 43 (6): 1425-1429

- **Chemerin Is an Antimicrobial Agent in Human Epidermis** *PLOS ONE*  
Banas, M., Zabieglo, K., Kasetty, G., Kapinska-Mrowiecka, M., Borowczyk, J., Drukala, J., Murzyn, K., Zabel, B. A., Butcher, E. C., Schroeder, J. M., Schmidtchen, A., Cichy, J.  
2013; 8 (3)
- **Plasmablast frequency and trafficking receptor expression are altered in pediatric ulcerative colitis** *INFLAMMATORY BOWEL DISEASES*  
Tarlton, N. J., Green, C. M., Lazarus, N. H., Rott, L., Wong, A. P., Abramson, O. N., Bremer, M., Butcher, E. C., Abramson, T.  
2012; 18 (12): 2381-2391
- **Plasmacytoid Dendritic Cells and Anti-Inflammatory Intestinal IgA Production** *Crohn's-and-Colitis-Foundation's-National-Clinical-and-Research Conference on Advances in Inflammatory Bowel Diseases*  
Lahl, K., Deal, E., Greenberg, H., Butcher, E.  
WILEY-BLACKWELL.2012: S108-S108
- **The chemoattractant chemerin suppresses melanoma by recruiting natural killer cell antitumor defenses** *JOURNAL OF EXPERIMENTAL MEDICINE*  
Pachynski, R. K., Zabel, B. A., Kohrt, H. E., Tejeda, N. M., Monnier, J., Swanson, C. D., Holzer, A. K., Gentles, A. J., Sperinde, G. V., Edalati, A., Hadeiba, H. A., Alizadeh, A. A., Butcher, et al  
2012; 209 (8): 1427-1435
- **Expression, Regulation, and Function of Atypical Chemerin Receptor CCRL2 on Endothelial Cells** *JOURNAL OF IMMUNOLOGY*  
Monnier, J., Lewen, S., O'Hara, E., Huang, K., Tu, H., Butcher, E. C., Zabel, B. A.  
2012; 189 (2): 956-967
- **Janus-like opposing roles of CD47 in autoimmune brain inflammation in humans and mice** *JOURNAL OF EXPERIMENTAL MEDICINE*  
Han, M. H., Lundgren, D. H., Jaiswal, S., Chao, M., Graham, K. L., Garris, C. S., Axtell, R. C., Ho, P. P., Lock, C. B., Woodard, J. I., Brownell, S. E., Zoudilova, M., Hunt, et al  
2012; 209 (7): 1325-1334
- **Chemokine-like receptor 1 regulates skeletal muscle cell myogenesis** *AMERICAN JOURNAL OF PHYSIOLOGY-CELL PHYSIOLOGY*  
Issa, M. E., Muruganandan, S., Ernst, M. C., Parlee, S. D., Zabel, B. A., Butcher, E. C., Sinal, C. J., Goralski, K. B.  
2012; 302 (11): C1621-C1631
- **The chemoattractant chemerin as a natural tumor suppressive cytokine.** *48th Annual Meeting of the American-Society-of-Clinical-Oncology (ASCO)*  
Pachynski, R. K., Zabel, B., Tejeda, N., Monnier, J., Holzer, A. K., Gentles, A., Kohrt, H. E., Hadeiba, H., Alizadeh, A. A., Butcher, E.  
AMER SOC CLINICAL ONCOLOGY.2012
- **Plasmacytoid Dendritic Cells Transport Peripheral Antigens to the Thymus to Promote Central Tolerance** *IMMUNITY*  
Hadeiba, H., Lahl, K., Edalati, A., Oderup, C., Habtezion, A., Pachynski, R., Nguyen, L., Ghodsi, A., Adler, S., Butcher, E. C.  
2012; 36 (3): 438-450
- **Disruption of the Chemokine-Like Receptor-1 (CMKLR1) Gene Is Associated with Reduced Adiposity and Glucose Intolerance** *ENDOCRINOLOGY*  
Ernst, M. C., Haidl, I. D., Zuniga, L. A., Dranse, H. J., Rourke, J. L., Zabel, B. A., Butcher, E. C., Sinal, C. J.  
2012; 153 (2): 672-682
- **A Disintegrin and Metalloproteinase 10 Regulates Antibody Production and Maintenance of Lymphoid Architecture** *JOURNAL OF IMMUNOLOGY*  
Chaimowitz, N. S., Martin, R. K., Cichy, J., Gibb, D. R., Patil, P., Kang, D., Farnsworth, J., Butcher, E. C., McCright, B., Conrad, D. H.  
2011; 187 (10): 5114-5122
- **Regulation of Chemerin Chemoattractant and Antibacterial Activity by Human Cysteine Cathepsins** *JOURNAL OF IMMUNOLOGY*  
Kulig, P., Kantyka, T., Zabel, B. A., Banas, M., Chyra, A., Stefanska, A., Tu, H., Allen, S. J., Handel, T. M., Kozik, A., Potempa, J., Butcher, E. C., Cichy, et al  
2011; 187 (3): 1403-1410
- **Panhematin provides a therapeutic benefit in experimental pancreatitis** *GUT*  
Habtezion, A., Kwan, R., Akhtar, E., Wanaski, S. P., Collins, S. D., Wong, R. J., Stevenson, D. K., Butcher, E. C., Omary, M. B.  
2011; 60 (5): 671-679
- **Absence of keratin 8 confers a paradoxical microflora-dependent resistance to apoptosis in the colon** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Habtezion, A., Toivola, D. M., Asghar, M. N., Kronmal, G. S., Brooks, J. D., Butcher, E. C., Omary, M. B.  
2011; 108 (4): 1445-1450

- **Heme oxygenase-1 is induced in peripheral blood mononuclear cells of patients with acute pancreatitis: a potential therapeutic target** *AMERICAN JOURNAL OF PHYSIOLOGY-GASTROINTESTINAL AND LIVER PHYSIOLOGY*  
Habtezion, A., Kwan, R., Yang, A. L., Morgan, M. E., Akhtar, E., Wanaski, S. P., Collins, S. D., Butcher, E. C., Kamal, A., Omary, M. B.  
2011; 300 (1): G12-G20
- **Synovial Tissue-Infiltrating Natural Killer Cells in Osteoarthritis and Periprosthetic Inflammation** *ARTHRITIS AND RHEUMATISM*  
Huss, R. S., Huddleston, J. I., Goodman, S. B., Butcher, E. C., Zabel, B. A.  
2010; 62 (12): 3799-3805
- **IL-17 Regulates Adipogenesis, Glucose Homeostasis, and Obesity** *JOURNAL OF IMMUNOLOGY*  
Zuniga, L. A., Shen, W., Joyce-Shaikh, B., Pyatnova, E. A., Richards, A. G., Thom, C., Andrade, S. M., Cua, D. J., Kraemer, F. B., Butcher, E. C.  
2010; 185 (11): 6947-6959
- **Chemoattractant Receptors and Lymphocyte Egress from Extralymphoid Tissue: Changing Requirements during the Course of Inflammation** *JOURNAL OF IMMUNOLOGY*  
Brown, M. N., Fintushel, S. R., Lee, M. H., Jennrich, S., Geherin, S. A., Hay, J. B., Butcher, E. C., Debes, G. F.  
2010; 185 (8): 4873-4882
- **Regulation of the Atypical Chemerin Receptor, CCRL2, on Activated Brain Endothelial Cells** *10th Annual Meeting of the Federation-of-Clinical-Immunology-Societies*  
Monnier, J., Zabel, B., Butcher, E.  
ACADEMIC PRESS INC ELSEVIER SCIENCE.2010: S63–S63
- **Chemokine-Like Receptor-1 Expression by Central Nervous System-Infiltrating Leukocytes and Involvement in a Model of Autoimmune Demyelinating Disease** *JOURNAL OF IMMUNOLOGY*  
Graham, K. L., Zabel, B. A., Loghavi, S., Zuniga, L. A., Ho, P. P., Sobel, R. A., Butcher, E. C.  
2009; 183 (10): 6717-6723
- **Potential role of chemerin in recruitment of plasmacytoid dendritic cells to diseased skin** *BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS*  
Skrzeczynska-Moncznik, J., Wawro, K., Stefanska, A., Oleszycka, E., Kulig, P., Zabel, B. A., Sulkowski, M., Kapinska-Mrowiecka, M., Czubak-Macugowska, M., BUTCHER, E. C., Cichy, J.  
2009; 380 (2): 323-327
- **Regulation of Chemerin Bioactivity by Plasma Carboxypeptidase N, Carboxypeptidase B (Activated Thrombin-activatable Fibrinolysis Inhibitor), and Platelets** *JOURNAL OF BIOLOGICAL CHEMISTRY*  
Du, X., Zabel, B. A., Myles, T., Allen, S. J., Handel, T. M., Lee, P. P., Butcher, E. C., Leung, L. L.  
2009; 284 (2): 751-758
- **Chemerin and the recruitment of NK cells to diseased skin** *36th Winter School on Molecule Interactions in Health and Disease*  
Skrzeczynska-Moncznik, J., Stefanska, A., Zabel, B. A., Kapinska-Mrowiecka, M., Butcher, E. C., Cichy, J.  
ACTA BIOCHIMICA POLONICA.2009: 355–60
- **Modeling the Role of Homologous Receptor Desensitization in Cell Gradient Sensing** *JOURNAL OF IMMUNOLOGY*  
Lin, F., Butcher, E. C.  
2008; 181 (12): 8335-8343
- **A role for leukocyte-endothelial adhesion mechanisms in epilepsy** *NATURE MEDICINE*  
Fabene, P. F., Mora, G. N., Martinello, M., Rossi, B., Merigo, F., Ottoboni, L., Bach, S., Angiari, S., Benati, D., Chakir, A., Zanetti, L., Schio, F., Osculati, et al  
2008; 14 (12): 1377-1383
- **CCR9 expression defines tolerogenic plasmacytoid dendritic cells able to suppress acute graft-versus-host disease** *NATURE IMMUNOLOGY*  
Hadeiba, H., Sato, T., Habtezion, A., Oderup, C., Pan, J., Butcher, E. C.  
2008; 9 (11): 1253-1260
- **An Indispensable Role for the Chemokine Receptor CCR10 in IgA Antibody-Secreting Cell Accumulation** *JOURNAL OF IMMUNOLOGY*  
Morteau, O., Gerard, C., Lu, B., Ghiran, S., Rits, M., Fujiwara, Y., Law, Y., Distelhorst, K., Nielsen, E. M., Hill, E. A., Kwan, R., Lazarus, N. H., Butcher, et al  
2008; 181 (9): 6309-6315
- **Mast cell-expressed orphan receptor CCRL2 binds chemerin and is required for optimal induction of IgE-mediated passive cutaneous anaphylaxis** *JOURNAL OF EXPERIMENTAL MEDICINE*

- Zabel, B. A., Nakae, S., Zuniga, L., Kim, J., Ohyama, T., Alt, C., Pan, J., Suto, H., Soler, D., Allen, S. J., Handel, T. M., Song, C. H., Galli, et al 2008; 205 (10): 2207-2220
- **Environmental cues, dendritic cells and the programming of tissue-selective lymphocyte trafficking** *NATURE IMMUNOLOGY*  
Sigmundsdottir, H., Butcher, E. C.  
2008; 9 (9): 981-987
  - **Lymphocyte electrotaxis in vitro and in vivo** *JOURNAL OF IMMUNOLOGY*  
Lin, F., Baldessari, F., Gyenge, C. C., Sato, T., Chambers, R. D., Santiago, J. G., Butcher, E. C.  
2008; 181 (4): 2465-2471
  - **Critical role for the chemokine receptor CXCR6 in homeostasis and activation of CD1d-restricted NKT cells** *JOURNAL OF IMMUNOLOGY*  
Germanov, E., Veinotte, L., Cullen, R., Chamberlain, E., Butcher, E. C., Johnston, B.  
2008; 181 (1): 81-91
  - **Prevention of acute graft-versus-host disease by blocking T-cell entry to secondary lymphoid organs** *BLOOD*  
Beilhack, A., Schulz, S., Baker, J., Beilhack, G. F., Nishimura, R., Baker, E. M., Landan, G., Herman, E. I., Butcher, E. C., Contag, C. H., Negrin, R. S.  
2008; 111 (5): 2919-2928
  - **NMR assignment of human chemerin, a novel chemoattractant** *BIOMOLECULAR NMR ASSIGNMENTS*  
Allen, S. J., Zabel, B. A., Kirkpatrick, J., Butcher, E. C., Nietlispach, D., Handel, T. M.  
2007; 1 (2): 171-173
  - **Regulation of chemerin bioactivity by plasma carboxypeptidase N, carboxypeptidase B (TAFIa) and platelets** *49th Annual Meeting of the American-Society-of-Hematology*  
Du, X., Zabel, B., Allen, S. J., Handel, T. M., Lee, P. P., Butcher, E. C., Leung, L. L.  
AMER SOC HEMATOLOGY.2007: 126A-127A
  - **INKT cells require CCR4 to localize to the airways and to induce airway hyperreactivity** *JOURNAL OF IMMUNOLOGY*  
Meyer, E. H., Wurbel, M., Staton, T. L., Pichavant, M., Kan, M. J., Savage, P. B., DeKruyff, R. H., Butcher, E. C., Campbell, J. J., Umetsu, D. T.  
2007; 179 (7): 4661-4671
  - **Chemerin, a novel adipokine that regulates adipogenesis and adipocyte metabolism** *JOURNAL OF BIOLOGICAL CHEMISTRY*  
Goralski, K. B., McCarthy, T. C., Hanniman, E. A., Zabel, B. A., Butcher, E. C., Parlee, S. D., Muruganandan, S., Sinal, C. J.  
2007; 282 (38): 28175-28188
  - **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
  - **Selectin, platelet plays a critical role in granulocyte access to the pregnant mouse uterus under physiological and pathological conditions** *BIOLOGY OF REPRODUCTION*  
Fernekorn, U., Butcher, E. C., Behrends, J., Karsten, C. M., Roebke, A., Schulze, T. J., Kirchner, H., Kruse, A.  
2007; 76 (4): 645-653
  - **Staphylococcus aureus-derived staphopain B, a potent cysteine protease activator of plasma chemerin** *JOURNAL OF IMMUNOLOGY*  
Kulig, P., Zabel, B. A., Dubin, G., Alllen, S. J., Ohyama, T., Potempa, J., Handel, T. M., Butcher, E. C., Cichy, J.  
2007; 178 (6): 3713-3720
  - **DCs metabolize sunlight-induced vitamin D3 to 'program' T cell attraction to the epidermal chemokine CCL27** *NATURE IMMUNOLOGY*  
Sigmundsdottir, H., Pan, J., Debes, G. F., Alt, C., Habtezion, A., Soler, D., Butcher, E. C.  
2007; 8 (3): 285-293
  - **Prevention of acute graft-versus-host disease by blocking T cell entry to secondary lymphoid organs** *96th Annual Meeting of the United-States-and-Canadian-Academy-of-Pathology*  
Schulz, S., Beilhack, A., Baker, J., Nishimura, R., Landan, G., Baker, E., Herman, E., BUTCHER, E. C., Contag, C. H., Negrin, R. S.  
NATURE PUBLISHING GROUP.2007: 259A-259A
  - **Prevention of acute-versus-host disease by blocking t cell entry to secondary lymphoid organs** *96th Annual Meeting of the United-States-and-Canadian-Academy-of-Pathology*  
Schultz, S., Beilhack, A., Baker, J., Nishimura, R., Landan, G., Baker, E., Herman, E. I., BUTCHER, E. C., Contag, C. H., Negrin, R. S.

NATURE PUBLISHING GROUP.2007: 259A–259A

- **The germinal center response is impaired in the absence of T cell-expressed CXCR5** *EUROPEAN JOURNAL OF IMMUNOLOGY*  
Arnold, C. N., Campbell, D. J., Lipp, M., Butcher, E. C.  
2007; 37 (1): 100-109
- **Chemokine-like receptor 1 expression by macrophages in vivo: Regulation by TGF-beta and TLR ligands** *EXPERIMENTAL HEMATOLOGY*  
Zabel, B. A., Ohyama, T., Zuniga, L., Kim, J., Johnston, B., Allen, S. J., Guido, D. G., Handel, T. M., Butcher, E. C.  
2006; 34 (8): 1106-1114
- **Chemoattractants, extracellular proteases, and the integrated host defense response** *EXPERIMENTAL HEMATOLOGY*  
Zabel, B. A., Zuniga, L., Ohyama, T., Allen, S. J., Cichy, J., Handel, T. M., Butcher, E. C.  
2006; 34 (8): 1021-1032
- **A cell-surface molecule involved in organ-specific homing of lymphocytes** *JOURNAL OF IMMUNOLOGY*  
Gallatin, W. M., Weissman, I. L., Butcher, E. C.  
2006; 177 (1): 5-9
- **Short-term homing assay reveals a critical role for lymphocyte function-associated antigen-1 in the hepatic recruitment of lymphocytes in graft-versus-host disease** *JOURNAL OF HEPATOLOGY*  
Sato, T., Habtezion, A., Beilhack, A., Schulz, S., Butcher, E., Thorlacius, H.  
2006; 44 (6): 1132-1140
- **Redundant role of chemokines CCL25/TECK and CCL28/MEC in IgA(+) plasmablast recruitment to the intestinal lamina propria after rotavirus infection** *JOURNAL OF IMMUNOLOGY*  
Feng, N., Jaimes, M. C., Lazarus, N. H., Monak, D., Zhang, C., Butcher, E. C., Greenberg, H. B.  
2006; 176 (10): 5749-5759
- **CD8(+) recent thymic emigrants home to and efficiently repopulate the small intestine epithelium** *NATURE IMMUNOLOGY*  
Staton, T. L., Habtezion, A., Winslow, M. M., Sato, T., Love, P. E., Butcher, E. C.  
2006; 7 (5): 482-488
- **RabGEF1 regulates stem cell factor/c-Kit-mediated signaling events and biological responses in mast cells** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Kalesnikoff, J., Rios, E. J., Chen, C. C., Nakae, S., Zabel, B. A., BUTCHER, E. C., Tsai, M., Tam, S. Y., Galli, S. J.  
2006; 103 (8): 2659-2664
- **Prevention of acute graft-versus-host disease despite compensatory function of lymphoid organs in vivo** *32nd Annual Meeting of the American-Society-for-Blood-and-Marrow-Transplantation*  
Beilback, A., Schulz, S., Baker, J., Beilback, G. F., Nishimura, R., Landan, G., Baker, E. M., Herman, E. I., BUTCHER, E. C., Contag, C. H., Negrin, R. S.  
ELSEVIER SCIENCE INC.2006: 11–11
- **T cell chemotaxis in a simple microfluidic device** *LAB ON A CHIP*  
Lin, F., Butcher, E. C.  
2006; 6 (11): 1462-1469
- **iNKT-Cells require CCR4 binding of CCL17 to localize to the airways where they are necessary and sufficient for inducing airway hyperreactivity.** *6th Annual Meeting of the Federation-of-Clinical-Immunology-Societies*  
Meyer, E., Wurbel, M., Staton, T., Savage, P., DeKruyff, R., Campbell, J., Butcher, E., Umetsu, D.  
ACADEMIC PRESS INC ELSEVIER SCIENCE.2006: S22–S22
- **Prevention of acute graft-versus-host disease despite compensatory function of lymphoid organs in vivo.** *47th Annual Meeting of the American-Society-of-Hematology*  
Beilhack, A., Schulz, S., Baker, J., Beilhack, G. F., Nishimura, R., Landan, G., Baker, E. M., Herman, E. I., BUTCHER, E. C., Contag, C. H., Negrin, R. S.  
AMER SOC HEMATOLOGY.2005: 173A–173A
- **Hemin-activated macrophages home to the pancreas and protect from acute pancreatitis via heme oxygenase-1 induction** *JOURNAL OF CLINICAL INVESTIGATION*  
Nakamichi, I., Habtezion, A., Zhong, B. H., Contag, C. H., BUTCHER, E. C., Omary, M. B.  
2005; 115 (11): 3007-3014

- **Chemerin activation by serine proteases of the coagulation, fibrinolytic, and inflammatory cascades** *JOURNAL OF BIOLOGICAL CHEMISTRY*  
Zabel, B. A., Allen, S. J., Kulig, P., Allen, J. A., Cichy, J., Handel, T. M., BUTCHER, E. C.  
2005; 280 (41): 34661-34666
- **Chemokine receptor CCR7 required for T lymphocyte exit from peripheral tissues** *NATURE IMMUNOLOGY*  
Debes, G. F., Arnold, C. N., Young, A. J., Krautwald, S., Lipp, M., Hay, J. B., BUTCHER, E. C.  
2005; 6 (9): 889-894
- **Chemoattractant induces LFA-1 associated PI 3K activity and cell migration that are dependent on Fyn signaling.** *FASEB journal*  
Bernardini, G., Kim, J. Y., Gismondi, A., Butcher, E. C., Santoni, A.  
2005; 19 (10): 1305-1307
- **Surface phenotype of Peyer's patch germinal center cells: Implications for the role of germinal centers in B cell differentiation (Reprinted)** *JOURNAL OF IMMUNOLOGY*  
BUTCHER, E. C., Rouse, R. V., Coffman, R. L., Nottenburg, C. N., Hardy, R. R., Weissman, I. L.  
2005; 175 (3): 1363-1372
- **Can cell systems biology rescue drug discovery?** *NATURE REVIEWS DRUG DISCOVERY*  
Butcher, E. C.  
2005; 4 (6): 461-467
- **Chemoattractant induces LFA-1 associated PI3K activity and cell migration that are dependent on Fyn signaling** *FASEB JOURNAL*  
Bernardini, G., Kim, J. Y., Gismondi, A., BUTCHER, E. C., Santoni, A.  
2005; 19 (8): 1305-?
- **Keratin-8-deficient mice develop chronic spontaneous Th2 colitis amenable to antibiotic treatment** *JOURNAL OF CELL SCIENCE*  
Habtezion, A., Toivola, D. M., BUTCHER, E. C., Omary, M. B.  
2005; 118 (9): 1971-1980
- **Modified representational difference analysis: isolation of differentially expressed mRNAs from rare cell populations** *ANALYTICAL BIOCHEMISTRY*  
O'Hara, E. F., Williams, M. B., Rott, L., Abola, P., Hansen, N., Jones, T., Gurjal, M. R., Federspiel, N., BUTCHER, E. C.  
2005; 336 (2): 221-230
- **Chemokine-like receptor 1 expression and Chemerin-directed chemotaxis distinguish plasmacytoid from myeloid dendritic cells in human blood** *JOURNAL OF IMMUNOLOGY*  
Zabel, B. A., Silverio, A. M., BUTCHER, E. C.  
2005; 174 (1): 244-251
- **Role for CXCR6 in recruitment of activated CD8(+) lymphocytes to inflamed liver** *JOURNAL OF IMMUNOLOGY*  
Sato, T., Thorlaci, H., Johnston, B., Staton, T. L., Xiang, W. K., Littman, D. R., BUTCHER, E. C.  
2005; 174 (1): 277-283
- **Functional involvement of P-selectin and MAdCAM-1 in the recruitment of alpha 4 beta 7-integrin-expressing monocyte-like cells to the pregnant mouse uterus** *EUROPEAN JOURNAL OF IMMUNOLOGY*  
Fernekorn, U., BUTCHER, E. C., Behrends, J., Hartz, S., Kruse, A.  
2004; 34 (12): 3423-3433
- **Systems biology in drug discovery** *NATURE BIOTECHNOLOGY*  
Butcher, E. C., BERG, E. L., Kunkel, E. J.  
2004; 22 (10): 1253-1259
- **Maturation and trafficking markers on rotavirus-specific B cells during acute infection and convalescence in children** *JOURNAL OF VIROLOGY*  
Jaimes, M. C., Rojas, O. L., Kunkel, E. J., Lazarus, N. H., Soler, D., BUTCHER, E. C., Bass, D., Angel, J., Franco, M. A., Greenberg, H. B.  
2004; 78 (20): 10967-10976
- **Unique gene expression program of human germinal center T helper cells** *BLOOD*  
Kim, C. H., Lim, H. W., Kim, J. R., Rott, L., Hillsamer, P., BUTCHER, E. C.  
2004; 104 (7): 1952-1960
- **CCL28 controls immunoglobulin (Ig)A plasma cell accumulation in the lactating mammary gland and IgA antibody transfer to the neonate** *JOURNAL OF EXPERIMENTAL MEDICINE*

Wilson, E., BUTCHER, E. C.

2004; 200 (6): 805-809

• **Rapid structure-activity and selectivity analysis of kinase inhibitors by BioMAP analysis in complex human primary cell-based models ASSAY AND DRUG DEVELOPMENT TECHNOLOGIES**

Kunkel, E. J., Plavec, I., Nguyen, D., Melrose, J., Rosler, E. S., Kao, L. T., Wang, Y. K., Hytopoulos, E., Bishop, A. C., Bateman, R., Shokat, K. M., BUTCHER, E. C., Berg, et al

2004; 2 (4): 431-441

• **An integrative biology approach for analysis of drug action in models of human vascular inflammation. FASEB journal**

Kunkel, E. J., Dea, M., Ebens, A., Hytopoulos, E., Melrose, J., Nguyen, D., Ota, K. S., Plavec, I., Wang, Y., Watson, S. R., Butcher, E. C., Berg, E. L.

2004; 18 (11): 1279-1281

• **Antigen-specific lymphocyte sequestration in lymphoid organs: Lack of essential roles for alpha(L) and alpha(4) integrin-dependent adhesion or G alpha(i) protein-coupled receptor signaling JOURNAL OF IMMUNOLOGY**

Arnold, C. N., BUTCHER, E. C., Campbell, D. J.

2004; 173 (2): 866-873

• **Murine CD8(+) recent thymic emigrants are (alpha)(E) integrin-positive and CC chemokine ligand 25 responsive JOURNAL OF IMMUNOLOGY**

Staton, T. L., Johnston, B., BUTCHER, E. C., Campbell, D. J.

2004; 172 (12): 7282-7288

• **An integrative biology approach for analysis of drug action in models of human vascular inflammation FASEB JOURNAL**

Kunkel, E. J., Dea, M., Ebens, A., Hytopoulos, E., Melrose, J., Nguyen, D., Ota, K. S., Plavec, I., Wang, Y., Watson, S. R., BUTCHER, E. C., Berg, E. L.

2004; 18 (9): 1279-?

• **A central role for the chemokine MEC/CCL28 in regulating IgA mediated passive immunity of the neonate Experimental Biology 2004 Annual Meeting**

Wilson, E., Feng, N. G., Greenberg, H., Butcher, E.

FEDERATION AMER SOC EXP BIOL.2004: A818-A818

• **Method for analyzing signaling networks in complex cellular systems PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA**

Plavec, I., Sirenko, O., Privat, S., Wang, Y. K., Dajee, M., Melrose, J., Nakao, B., Hytopoulos, E., BERG, E. L., Butcher, E. C.

2004; 101 (5): 1223-1228

• **RhoA and zeta PKC control distinct modalities of LFA-1 activation by chemokines: Critical role of LFA-1 affinity triggering in lymphocyte in vivo homing IMMUNITY**

Giagulli, C., Scarpini, E., Ottoboni, L., Narumiya, S., BUTCHER, E. C., Constantin, G., Laudanna, C.

2004; 20 (1): 25-35

• **Chemokines in the systemic organization of immunity IMMUNOLOGICAL REVIEWS**

Campbell, D. J., Kim, C. H., BUTCHER, E. C.

2003; 195: 58-71

• **Plasma-cell homing NATURE REVIEWS IMMUNOLOGY**

Kunkel, E. J., BUTCHER, E. C.

2003; 3 (10): 822-829

• **Targeting T cell responses by selective chemokine receptor expression SEMINARS IN IMMUNOLOGY**

Campbell, D. J., Debes, G. F., Johnston, B., Wilson, E., BUTCHER, E. C.

2003; 15 (5): 277-286

• **Differential chemokine responses and homing patterns of murine TCR alpha beta NKT cell subsets JOURNAL OF IMMUNOLOGY**

Johnston, B., Kim, C. H., Soler, D., Emoto, M., BUTCHER, E. C.

2003; 171 (6): 2960-2969

• **Motility analysis of pancreatic adenocarcinoma cells reveals a role for the atypical zeta isoform of protein kinase C in cancer cell movement LABORATORY INVESTIGATION**

Laudanna, C., Sorio, C., Tecchio, C., BUTCHER, E. C., BONORA, A., Bassi, C., Scarpa, A.

2003; 83 (8): 1155-1163

- **Dendritic cells support sequential reprogramming of chemoattractant receptor profiles during naive to effector T cell differentiation** *JOURNAL OF IMMUNOLOGY*  
Kim, C. H., Nagata, K., BUTCHER, E. C.  
2003; 171 (1): 152-158
- **CD8(+) T cells from patients with acute multiple sclerosis display selective increase of adhesiveness in brain venules: a critical role for P-selectin glycoprotein ligand-1** *BLOOD*  
Battistini, L., Piccio, L., Rossi, B., Bach, S., Galgani, S., Gasperini, C., Ottoboni, L., Ciabini, D., Caramia, M. D., Bernardi, G., Laudanna, C., Scarpini, E., McEver, et al  
2003; 101 (12): 4775-4782
- **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
- **A common mucosal chemokine (mucosae-associated epithelial chemokine/CCL28) selectively attracts IgA plasmablasts** *JOURNAL OF IMMUNOLOGY*  
Lazarus, N. H., Kunkel, E. J., Johnston, B., Wilson, E., Youngman, K. R., Butcher, E. C.  
2003; 170 (7): 3799-3805
- **CCR10 expression is a common feature of circulating and mucosal epithelial tissue IgA Ab-secreting cells** *JOURNAL OF CLINICAL INVESTIGATION*  
Kunkel, E. J., Kim, C. H., Lazarus, N. H., Vierra, M. A., Soler, D., Bowman, E. P., BUTCHER, E. C.  
2003; 111 (7): 1001-1010
- **Lectin-like oxidized LDL receptor-1 is a cell-adhesion molecule involved in endotoxin-induced inflammation** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Honjo, M., Nakamura, K., Yamashiro, K., Kiryu, J., Tanihara, H., McEvoy, L. M., Honda, Y., BUTCHER, E. C., Masaki, T., Sawamura, T.  
2003; 100 (3): 1274-1279
- **Rotavirus-specific B cells induced by recent infection in adults and children predominantly express the intestinal homing receptor alpha 4 beta 7** *VIROLOGY*  
Gonzalez, A. M., Jaimes, M. C., Cajiao, I., Rojas, O. L., Cohen, J., Pothier, P., Kohli, E., BUTCHER, E. C., Greenberg, H. B., Angel, J., Franco, M. A.  
2003; 305 (1): 93-105
- **Liver-infiltrating lymphocytes in end-stage hepatitis C virus: Subsets, activation status, and chemokine receptor phenotypes** *JOURNAL OF HEPATOLOGY*  
Boisvert, J., Kunkel, E. J., Campbell, J. J., Keeffe, E. B., BUTCHER, E. C., Greenberg, H. B.  
2003; 38 (1): 67-75
- **Distinct subsets of human V alpha 24-invariant NKT cells: cytokine responses and chemokine receptor expression** *TRENDS IN IMMUNOLOGY*  
Kim, C. H., BUTCHER, E. C., Johnston, B.  
2002; 23 (11): 516-519
- **Bovine gamma delta T cell subsets express distinct patterns of chemokine responsiveness and adhesion molecules: A mechanism for tissue-specific gamma delta T cell subset accumulation** *JOURNAL OF IMMUNOLOGY*  
Wilson, E., Hedges, J. F., BUTCHER, E. C., Briskin, M., Jutila, M. A.  
2002; 169 (9): 4970-4975
- **Tropism of varicella-zoster virus for human tonsillar CD4(+) T lymphocytes that express activation, memory, and skin homing markers** *JOURNAL OF VIROLOGY*  
Ku, C. C., Padilla, J. A., Grose, C., BUTCHER, E. C., Arvin, A. M.  
2002; 76 (22): 11425-11433
- **Intestinal attraction: CCL25 functions in effector lymphocyte recruitment to the small intestine** *JOURNAL OF CLINICAL INVESTIGATION*  
Campbell, D. J., BUTCHER, E. C.  
2002; 110 (8): 1079-1081
- **Cytokine control of memory B cell homing machinery** *JOURNAL OF IMMUNOLOGY*  
Roy, M. P., Kim, C. H., BUTCHER, E. C.  
2002; 169 (4): 1676-1682
- **Rapid leukocyte integrin activation by chemokines** *IMMUNOLOGICAL REVIEWS*

- Laudanna, C., Kim, J. Y., Constantin, G., BUTCHER, E. C.  
2002; 186: 37-46
- **Trafficking machinery of NKT cells: shared and differential chemokine receptor expression among V alpha 24(+)V beta 11(+) NKT cell subsets with distinct cytokine-producing capacity *BLOOD***  
Kim, C. H., Johnston, B., BUTCHER, E. C.  
2002; 100 (1): 11-16
  - **Hematopoietic stem cells are uniquely selective in their migratory response to chemokines *JOURNAL OF EXPERIMENTAL MEDICINE***  
Wright, D. E., Bowman, E. P., Wagers, A. J., BUTCHER, E. C., Weissman, I. L.  
2002; 195 (9): 1145-1154
  - **Vascular morphogenesis and differentiation after adoptive transfer of human endothelial cells to immunodeficient mice *AMERICAN JOURNAL OF PATHOLOGY***  
Skovseth, D. K., Yamanaka, T., Brandtzaeg, P., BUTCHER, E. C., Haraldsen, G.  
2002; 160 (5): 1629-1637
  - **Chemokines in rapid leukocyte adhesion triggering and migration *SEMINARS IN IMMUNOLOGY***  
Johnston, B., BUTCHER, E. C.  
2002; 14 (2): 83-92
  - **Unique yet differential trafficking machinery among NKT cell subsets**  
Kim, C. H., Johnston, B., BUTCHER, E. C.  
FEDERATION AMER SOC EXP BIOL.2002: A1212-A1212
  - **Correlation of tissue distribution, developmental phenotype, and intestinal homing receptor expression of antigen-specific B cells during the murine anti-rotavirus immune response *JOURNAL OF IMMUNOLOGY***  
Youngman, K. R., Franco, M. A., Kuklin, N. A., Rott, L. S., BUTCHER, E. C., Greenberg, H. B.  
2002; 168 (5): 2173-2181
  - **Molecular mechanisms involved in lymphocyte recruitment in inflamed brain microvessels: Critical roles for P-selectin glycoprotein ligand-1 and heterotrimeric G(i)-linked receptors *JOURNAL OF IMMUNOLOGY***  
Piccio, L., Rossi, B., Scarpini, E., Laudanna, C., Giagulli, C., Issekutz, A. C., VESTWEBER, D., BUTCHER, E. C., Constantin, G.  
2002; 168 (4): 1940-1949
  - **Alterations in the expression of homing-associated molecules at the maternal/fetal interface during the course of pregnancy *BIOLOGY OF REPRODUCTION***  
Kruse, A., Martens, N., Fernekorn, U., Hallmann, R., BUTCHER, E. C.  
2002; 66 (2): 333-345
  - **The intestinal chemokine thymus-expressed chemokine (CCL25) attracts IgA antibody-secreting cells *JOURNAL OF EXPERIMENTAL MEDICINE***  
Bowman, E. P., Kuklin, N. A., Youngman, K. R., Lazarus, N. H., Kunkel, E. J., Pan, J. L., Greenberg, H. B., Butcher, E. C.  
2002; 195 (2): 269-275
  - **Rapid acquisition of tissue-specific homing phenotypes by CD4(+) T cells activated in cutaneous or mucosal lymphoid tissues *JOURNAL OF EXPERIMENTAL MEDICINE***  
Campbell, D. J., BUTCHER, E. C.  
2002; 195 (1): 135-141
  - **Homeostatic chemokines and the targeting of regional immunity. *Advances in experimental medicine and biology***  
Kunkel, E., Butcher, E.  
2002; 512: 65-72
  - **Homeostatic chemokines and the targeting of regional immunity (Reprinted from *Immunity*, vol 16, pg 1-4, 2002) 9th International Conference on Lymphocyte Activation and Immune Regulation**  
Kunkel, E. J., BUTCHER, E. C.  
KLUWER ACADEMIC/PLENUM PUBL.2002: 65-72
  - **Expression of the chemokine receptors CCR4, CCR5, and CXCR3 by human tissue-infiltrating lymphocytes *AMERICAN JOURNAL OF PATHOLOGY***  
Kunkel, E. J., Boisvert, J., Murphy, K., Vierra, M. A., Genovese, M. C., Wardlaw, A. J., Greenberg, H. B., Hodge, M. R., Wu, L. J., BUTCHER, E. C., Campbell, J. J.

2002; 160 (1): 347-355

● **Chemokines and the tissue-specific migration of lymphocytes** *IMMUNITY*

Kunkel, E. J., BUTCHER, E. C.

2002; 16 (1): 1-4

● **CC chemokine receptor (CCR)4 and the CCR10 ligand cutaneous T cell-attracting chemokine (CTACK) in lymphocyte trafficking to inflamed skin** *JOURNAL OF EXPERIMENTAL MEDICINE*

Reiss, Y., Proudfoot, A. E., Power, C. A., Campbell, J. J., BUTCHER, E. C.

2001; 194 (10): 1541-1547

● **Rules of chemokine receptor association with T cell polarization in vivo** *JOURNAL OF CLINICAL INVESTIGATION*

Kim, C. H., Rott, L., Kunkel, E. J., Genovese, M. C., Andrew, D. P., Wu, L. J., BUTCHER, E. C.

2001; 108 (9): 1331-1339

● **Nonpolarized memory T cells** *TRENDS IN IMMUNOLOGY*

Kim, C. H., Campbell, D. J., BUTCHER, E. C.

2001; 22 (10): 527-530

● **Immune cell trafficking in uterus and early life is dominated by the mucosal addressin MAdCAM-1 in humans** *GASTROENTEROLOGY*

SALMI, M., Alanen, K., Grenman, S., Briskin, M., BUTCHER, E. C., JALKANEN, S.

2001; 121 (4): 853-864

● **Separable effector T cell populations specialized for B cell help or tissue inflammation** *NATURE IMMUNOLOGY*

Campbell, D. J., Kim, C. H., BUTCHER, E. C.

2001; 2 (9): 876-881

● **Subspecialization of CXCR5(+) T cells: B helper activity is focused in a germinal center-localized subset of CXCR5(+) T cells** *JOURNAL OF EXPERIMENTAL MEDICINE*

Kim, C. H., Rott, J. S., Clark-Lewis, I., Campbell, D. J., Wu, L., BUTCHER, E. C.

2001; 193 (12): 1373-1381

● **Unique subpopulations of CD56(+) NK and NK-T peripheral blood lymphocytes identified by chemokine receptor expression repertoire** *JOURNAL OF IMMUNOLOGY*

Campbell, J. J., Qin, S. X., Unutmaz, D., Soler, D., Murphy, K. E., Hodge, M. R., Wu, L. J., BUTCHER, E. C.

2001; 166 (11): 6477-6482

● **CXCR5 expression defines fundamental specialization of CD4 T cells preceding the conventional Th1/2 polarization**

Kim, C. H., Rou, L. S., Campbell, D. J., Clarke-Lewis, I., Wu, L. J., BUTCHER, E. C.

FEDERATION AMER SOC EXP BIOL.2001: A360-A360

● **Bonzo/CXCR6 expression defines type 1-polarized T-cell subsets with extralymphoid tissue homing potential** *JOURNAL OF CLINICAL INVESTIGATION*

Kim, C. H., Kunkel, E. J., Boisvert, J., Johnston, B., Campbell, J. J., Genovese, M. C., Greenberg, H. B., BUTCHER, E. C.

2001; 107 (5): 595-601

● **Expression of chemokine receptors by lung T cells from normal and asthmatic subjects** *JOURNAL OF IMMUNOLOGY*

Campbell, J. J., Brightling, C. E., Symon, F. A., Qin, S., Murphy, K. E., Hodge, M., Andrew, D. P., Wu, L. J., BUTCHER, E. C., Wardlaw, A. J.

2001; 166 (4): 2842-2848

● **CCR7 expression and memory T cell diversity in humans** *JOURNAL OF IMMUNOLOGY*

Campbell, J. J., Murphy, K. E., Kunkel, E. J., Brightling, C. E., Soler, D., Shen, Z. M., Boisvert, J., Greenberg, H. B., Vierra, M. A., Goodman, S. B., Genovese, M. C., Wardlaw, A. J., BUTCHER, et al

2001; 166 (2): 877-884

● **C-C chemokine receptor 4 expression defines a major subset of circulating nonintestinal memory T cells of both Th1 and Th2 potential** *JOURNAL OF IMMUNOLOGY*

Andrew, D. P., Ruffing, N., Kim, C. H., Miao, W. Y., Heath, H., Li, Y., Murphy, K., Campbell, J. J., BUTCHER, E. C., Wu, L. J.

2001; 166 (1): 103-111

● **alpha(4)beta(7) independent pathway for CD8+ T cell-mediated intestinal immunity to rotavirus** *JOURNAL OF CLINICAL INVESTIGATION*

Kuklin, N. A., Rott, L., Darling, J., Campbell, J. J., Franco, M., Feng, N. G., Muller, W., Wagner, N., Altman, J., BUTCHER, E. C., Greenberg, H. B.

2000; 106 (12): 1541-1552

- **Expression of alpha 4 beta 7 and E-selectin ligand by circulating memory B cells: implications for targeted trafficking to mucosal and systemic sites** *JOURNAL OF LEUKOCYTE BIOLOGY*

Rott, L. S., Briskin, M. J., BUTCHER, E. C.

2000; 68 (6): 807-814

- **Chemokines trigger immediate beta 2 integrin affinity and mobility changes: Differential regulation and roles in lymphocyte arrest under flow** *IMMUNITY*

Constantin, G., Majeed, M., Giagulli, C., Piccio, L., Kim, J. Y., BUTCHER, E. C., Laudanna, C.

2000; 13 (6): 759-769

- **A novel chemokine ligand for CCR10 and CCR3 expressed by epithelial cells in mucosal tissues.** *Journal of immunology*

Pan, J., Kunkel, E. J., Gossler, U., Lazarus, N., Langdon, P., Broadwell, K., Vierra, M. A., Genovese, M. C., BUTCHER, E. C., Soler, D.

2000; 165 (6): 2943-2949

- **Cutting edge: A novel chemokine ligand for CCR10 and CCR3 expressed by epithelial cells in mucosal tissues** *JOURNAL OF IMMUNOLOGY*

Pan, J. L., Kunkel, E. J., Gossler, U., Lazarus, N., Langdon, P., Broadwell, K., Vierra, M. A., Genovese, M. C., BUTCHER, E. C., Soler, D.

2000; 165 (6): 2943-2949

- **The primate lentiviral receptor Bonzo/STRL33 is coordinately regulated with CCR5 and its expression pattern is conserved between human and mouse** *JOURNAL OF IMMUNOLOGY*

Unutmaz, D., Xiang, W. K., Sunshine, M. J., Campbell, J., Butcher, E., Littman, D. R.

2000; 165 (6): 3284-3292

- **Lymphocyte CC chemokine receptor 9 and epithelial thymus-expressed chemokine (TECK) expression distinguish the small intestinal immune compartment: Epithelial expression of tissue-specific chemokines as an organizing principle in regional immunity** *JOURNAL OF EXPERIMENTAL MEDICINE*

Kunkel, E. J., Campbell, J. J., Haraldsen, G., Pan, J. L., Boisvert, J., Roberts, A. I., Ebert, E. C., Vierra, M. A., Goodman, S. B., Genovese, M. C., Wardlaw, A. J., Greenberg, H. B., Parker, et al

2000; 192 (5): 761-767

- **Chemokines in tissue-specific and microenvironment-specific lymphocyte homing** *CURRENT OPINION IN IMMUNOLOGY*

Campbell, J. J., BUTCHER, E. C.

2000; 12 (3): 336-341

- **Intestinal homing receptor expression during the B cell response to murine rotavirus infection.**

Youngman, K. R., Franco, M. A., Kuklin, N. A., Rott, L. S., Greenberg, H. B., BUTCHER, E. C.

FEDERATION AMER SOC EXP BIOL.2000: A973-A973

- **alpha 4 beta 7 independent pathway for CD8 T cell mediated intestinal immunity to rotavirus**

Kuklin, N. A., Rott, L., Darling, J., Campbell, J. J., Franco, M., Feng, N., Muller, W., Wagner, N., Altman, J. D., BUTCHER, E. C., Greenberg, H. B.

FEDERATION AMER SOC EXP BIOL.2000: A971-A971

- **Developmental switches in chemokine response profiles during B cell differentiation and maturation** *JOURNAL OF EXPERIMENTAL MEDICINE*

Bowman, E. P., Campbell, J. J., Soler, D., Dong, Z. J., Manlongat, N., Picarella, D., Hardy, R. R., BUTCHER, E. C.

2000; 191 (8): 1303-1317

- **Specialized patterns of vascular differentiation antigens in the pregnant mouse uterus and the placenta** *BIOLOGY OF REPRODUCTION*

Kruse, A., Hallmann, R., BUTCHER, E. C.

1999; 61 (6): 1393-1401

- **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

- **Human G protein-coupled receptor GPR-9-G/CC chemokine receptor 9 is selectively expressed on intestinal homing T lymphocytes, mucosal lymphocytes, and thymocytes and is required for thymus-expressed chemokine-mediated chemotaxis** *JOURNAL OF EXPERIMENTAL MEDICINE*

Zabel, B. A., Agace, W. W., Campbell, J. J., Heath, H. M., Parent, D., Roberts, A. I., Ebert, E. C., Kassam, N., Qin, S. X., Zovko, M., LaRosa, G. J., Yang, L. L., Soler, et al

1999; 190 (9): 1241-1255

- **Cutting edge: Developmental switches in chemokine responses during T cell maturation** *JOURNAL OF IMMUNOLOGY*  
Campbell, J. J., Pan, J. L., BUTCHER, E. C.  
1999; 163 (5): 2353-2357
- **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
- **Evidence of specialized leukocyte-vascular homing interactions at the maternal/fetal interface** *EUROPEAN JOURNAL OF IMMUNOLOGY*  
Kruse, A., Merchant, M. J., Hallmann, R., BUTCHER, E. C.  
1999; 29 (4): 1116-1126
- **Inhibition of experimental autoimmune encephalomyelitis by a tyrosine kinase inhibitor** *JOURNAL OF IMMUNOLOGY*  
Constantin, G., Laudanna, C., Brocke, S., BUTCHER, E. C.  
1999; 162 (2): 1144-1149
- **L-selectin-mediated leukocyte adhesion in vivo: Microvillous distribution determines tethering efficiency, but not rolling velocity** *JOURNAL OF EXPERIMENTAL MEDICINE*  
Stein, J. V., Cheng, G. Y., Stockton, B. M., Fors, B. P., BUTCHER, E. C., von Andrian, U. H.  
1999; 189 (1): 37-49
- **Lymphocyte trafficking and regional immunity** *ADVANCES IN IMMUNOLOGY, VOL. 72*  
BUTCHER, E. C., Williams, M., Youngman, K., Rott, L., Briskin, M.  
1999; 72: 209-253
- **Human airway epithelial monolayers promote selective transmigration of memory T cells: A transepithelial model of lymphocyte migration into the airways** *AMERICAN JOURNAL OF RESPIRATORY CELL AND MOLECULAR BIOLOGY*  
Miller, L. A., BUTCHER, E. C.  
1998; 19 (6): 892-900
- **Evidence of zeta protein kinase C involvement in polymorphonuclear neutrophil integrin-dependent adhesion and chemotaxis** *JOURNAL OF BIOLOGICAL CHEMISTRY*  
Laudanna, C., Mochly-Rosen, D., Liron, T., Constantin, G., BUTCHER, E. C.  
1998; 273 (46): 30306-30315
- **Tyrphostin AG490, a tyrosine kinase inhibitor, blocks actively induced experimental autoimmune encephalomyelitis** *EUROPEAN JOURNAL OF IMMUNOLOGY*  
Constantin, G., Brocke, S., Izikson, A., Laudanna, C., BUTCHER, E. C.  
1998; 28 (11): 3523-3529
- **Regulation of chemotactic and proadhesive responses to chemoattractant receptors by RGS (Regulator of G-protein Signaling) family members** *JOURNAL OF BIOLOGICAL CHEMISTRY*  
Bowman, E. P., Campbell, J. J., Druey, K. M., Scheschonka, A., Kehrl, J. H., BUTCHER, E. C.  
1998; 273 (43): 28040-28048
- **The memory B cell subset responsible for the secretory IgA response and protective humoral immunity to rotavirus expresses the intestinal homing receptor, alpha(4)beta(7)** *JOURNAL OF IMMUNOLOGY*  
Williams, M. B., Rose, J. R., Rott, L. S., Franco, M. A., Greenberg, H. B., BUTCHER, E. C.  
1998; 161 (8): 4227-4235
- **6-C-kine (SLC), a lymphocyte adhesion-triggering chemokine expressed by high endothelium, is an agonist for the MIP-3 beta receptor CCR7** *JOURNAL OF CELL BIOLOGY*  
Campbell, J. J., Bowman, E. P., Murphy, K., Youngman, K. R., Siani, M. A., Thompson, D. A., Wu, L. J., Zlotnik, A., BUTCHER, E. C.  
1998; 141 (4): 1053-1059
- **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
- **Asp-698 and Asp-811 of the integrin alpha(4)-subunit are critical for the formation of a functional heterodimer** *JOURNAL OF BIOLOGICAL CHEMISTRY*

- Zeller, Y., Lohr, J., Sammar, M., BUTCHER, E. C., Altevogt, P.  
1998; 273 (12): 6786-6795
- **Complexity and differential expression of carbohydrate epitopes associated with L-selectin recognition of high endothelial venules** *AMERICAN JOURNAL OF PATHOLOGY*  
BERG, E. L., Mullowney, A. T., Andrew, D. P., Goldberg, J. E., BUTCHER, E. C.  
1998; 152 (2): 469-477
  - **Molecular mechanisms of lymphocyte homing to peripheral lymph nodes** *JOURNAL OF EXPERIMENTAL MEDICINE*  
Warnock, R. A., Askari, S., BUTCHER, E. C., von Andrian, U. H.  
1998; 187 (2): 205-216
  - **Chemokines and the arrest of lymphocytes rolling under flow conditions** *SCIENCE*  
Campbell, J. J., Hedrick, J., Zlotnik, A., Siani, M. A., Thompson, D. A., BUTCHER, E. C.  
1998; 279 (5349): 381-384
  - **Expression of the mucosal homing receptor alpha(4)beta(7) correlates with the ability of CD8(+) memory T cells to clear rotavirus infection** *JOURNAL OF VIROLOGY*  
Rose, J. R., Williams, M. B., Rott, L. S., BUTCHER, E. C., Greenberg, H. B.  
1998; 72 (1): 726-730
  - **Multistep navigation and the combinatorial control of leukocyte chemotaxis** *JOURNAL OF CELL BIOLOGY*  
Foxman, E. F., Campbell, J. J., BUTCHER, E. C.  
1997; 139 (5): 1349-1360
  - **Anti-CD43 inhibits monocyte-endothelial adhesion in inflammation and atherogenesis** *BLOOD*  
McEvoy, L. M., JUTILA, M. A., Tsao, P. S., Cooke, J. P., BUTCHER, E. C.  
1997; 90 (9): 3587-3594
  - **Chemoattractant receptor cross talk as a regulatory mechanism in leukocyte adhesion and migration** *EUROPEAN JOURNAL OF IMMUNOLOGY*  
Campbell, J. J., Foxman, E. F., BUTCHER, E. C.  
1997; 27 (10): 2571-2578
  - **Elevation of intracellular cAMP inhibits RhoA activation and integrin-dependent leukocyte adhesion induced by chemoattractants** *JOURNAL OF BIOLOGICAL CHEMISTRY*  
Laudanna, C., Campbell, J. J., BUTCHER, E. C.  
1997; 272 (39): 24141-24144
  - **Expression of mucosal homing receptor alpha 4 beta 7 by circulating CD4(+) cells with memory for intestinal rotavirus** *JOURNAL OF CLINICAL INVESTIGATION*  
Rott, L. S., Rose, J. R., Bass, D., Williams, M. B., Greenberg, H. B., BUTCHER, E. C.  
1997; 100 (5): 1204-1208
  - **Vascular adhesion protein 1 (VAP-1) mediates lymphocyte subtype-specific, selectin-independent recognition of vascular endothelium in human lymph nodes** *JOURNAL OF EXPERIMENTAL MEDICINE*  
SALMI, M., Tohka, S., BERG, E. L., BUTCHER, E. C., JALKANEN, S.  
1997; 186 (4): 589-600
  - **Homing of naive and memory T lymphocyte subsets to Peyer's patches, lymph nodes, and spleen** *JOURNAL OF IMMUNOLOGY*  
Williams, M. B., BUTCHER, E. C.  
1997; 159 (4): 1746-1752
  - **Structure-function analysis of the integrin beta(7) subunit - Identification of domains involved in adhesion to MAdCAM-1** *JOURNAL OF IMMUNOLOGY*  
Tidswell, M., Pachynski, R., Wu, S. W., Qiu, S. Q., Dunham, E., Cochran, N., Briskin, M. J., Kilshaw, P. J., Lazarovits, A. I., Andrew, D. P., BUTCHER, E. C., YEDNOCK, T. A., Erle, et al  
1997; 159 (3): 1497-1505
  - **Human mucosal addressin cell adhesion molecule-1 is preferentially expressed in intestinal tract and associated lymphoid tissue** *AMERICAN JOURNAL OF PATHOLOGY*  
Briskin, M., WinsorHines, D., Shyjan, A., Cochran, N., Bloom, S., Wilson, J., McEvoy, L. M., BUTCHER, E. C., Kassam, N., Mackay, C. R., NEWMAN, W., Ringler, D. J.

1997; 151 (1): 97-110

● **Novel vascular molecule involved in monocyte adhesion to aortic endothelium in models of atherogenesis** *JOURNAL OF EXPERIMENTAL MEDICINE*

McEvoy, L. M., Sun, H. L., Tsao, P. S., Cooke, J. P., Berliner, J. A., BUTCHER, E. C.  
1997; 185 (12): 2069-2077

● **Specialization of mucosal follicular dendritic cells revealed by mucosal addressin-cell adhesion molecule-1 display** *JOURNAL OF IMMUNOLOGY*

SZABO, M. C., BUTCHER, E. C., McEvoy, L. M.  
1997; 158 (12): 5584-5588

● **alpha 4 beta 7 integrin expression is associated with the leukemic evolution of human and murine T-cell lymphoblastic lymphomas** *AMERICAN JOURNAL OF PATHOLOGY*

Dolcetti, R., Giardini, R., Doglioni, C., Cariati, R., Pomponi, F., D'Orazi, C., Rao, S., Lazarovits, A. I., BUTCHER, E. C., Boiocchi, M.  
1997; 150 (5): 1595-1605

● **Anti-CD43 inhibition of T cell homing** *JOURNAL OF EXPERIMENTAL MEDICINE*

McEvoy, L. M., Sun, H. L., Frelinger, J. G., BUTCHER, E. C.  
1997; 185 (8): 1493-1498

● **Novel method for following lymphocyte traffic in mice using [<sup>3</sup>H]glycerol labeling** *JOURNAL OF IMMUNOLOGICAL METHODS*

Constantin, G., Laudanna, C., BUTCHER, E. C.  
1997; 203 (1): 35-44

● **Differential expression of tissue-specific adhesion molecules on human circulating antibody-forming cells after systemic, enteric, and nasal immunizations**

- A molecular basis for the compartmentalization of effector B cell responses *7th International Congress of Mucosal Immunology*  
QUIDINGJARBRINK, M., Nordstrom, I., GRANSTROM, G., Kilander, A., Jertborn, M., BUTCHER, E. C., Lazarovits, A. I., Holmgren, J., Cerkinsky, C.  
AMER SOC CLINICAL INVESTIGATION INC.1997: 1281-86

● **RANTES stimulation of T lymphocyte adhesion and activation: Role for LFA-1 and ICAM-3** *EUROPEAN JOURNAL OF IMMUNOLOGY*

SZABO, M. C., BUTCHER, E. C., MCINTYRE, B. W., Schall, T. J., Bacon, K. B.  
1997; 27 (5): 1061-1068

● **Monoclonal antibodies specific for beta(7) integrin and mucosal addressin cell adhesion molecule-1 (MAdCAM-1) reduce inflammation in the colon of scid mice reconstituted with CD45RB(high) CD4(+) T cells** *JOURNAL OF IMMUNOLOGY*

Picarella, D., Hurlbut, P., Rottman, J., Shi, X. J., Butcher, E., Ringler, D. J.  
1997; 158 (5): 2099-2106

● **Function of lymphocyte homing-associated adhesion molecules on human natural killer and lymphokine-activated killer cells** *JOURNAL OF IMMUNOLOGY*

Uksila, J., SALMI, M., BUTCHER, E. C., TARKKANEN, J., JALKANEN, S.  
1997; 158 (4): 1610-1617

● **Homing potentials of circulating lymphocytes in humans depend on the site of activation - Oral, but not parenteral, typhoid vaccination induces circulating antibody-secreting cells that all bear homing receptors directing them to the gut** *JOURNAL OF IMMUNOLOGY*

KANTELE, A., Kantele, J. M., Savilahti, E., Westerholm, M., ARVILOMMI, H., Lazarovits, A., BUTCHER, E. C., MAKELA, P. H.  
1997; 158 (2): 574-579

● **Genetic defect in T lymphocyte-specific homing into peripheral lymph nodes** *EUROPEAN JOURNAL OF IMMUNOLOGY*

Nakano, H., Tamura, T., Yoshimoto, T., Yagita, H., Miyasaka, M., BUTCHER, E. C., Nariuchi, H., Kakiuchi, T., Matsuzawa, A.  
1997; 27 (1): 215-221

● **Phenotype, and migration properties of three major subsets of tissue homing T cells in sheep** *EUROPEAN JOURNAL OF IMMUNOLOGY*

Mackay, C. R., Andrew, D. P., Briskin, M., Ringler, D. J., BUTCHER, E. C.  
1996; 26 (10): 2433-2439

● **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

● **Functional cloning of the cDNA for a human hyaluronan synthase** *JOURNAL OF BIOLOGICAL CHEMISTRY*

- Shyjan, A. M., Heldin, P., BUTCHER, E. C., Yoshino, T., Briskin, M. J.  
1996; 271 (38): 23395-23399
- **Peripheral lymphoid tissue-like adhesion molecule expression in nodular infiltrates in inflammatory myopathies** *NEUROMUSCULAR DISORDERS*  
DeBleecker, J. L., Engel, A. G., BUTCHER, E. C.  
1996; 6 (4): 255-260
  - **Biology of chemokine and classical chemoattractant receptors: Differential requirements for adhesion-triggering versus chemotactic responses in lymphoid cells** *JOURNAL OF CELL BIOLOGY*  
Campbell, J. J., Qin, S. X., Bacon, K. B., Mackay, C. R., BUTCHER, E. C.  
1996; 134 (1): 255-266
  - **ICAM-1, VCAM-1, and MAdCAM-1 are expressed on choroid plexus epithelium but not endothelium and mediate binding of lymphocytes in vitro** *AMERICAN JOURNAL OF PATHOLOGY*  
Steffen, B. J., Breier, G., BUTCHER, E. C., Schulz, M., Engelhardt, B.  
1996; 148 (6): 1819-1838
  - **A fundamental subdivision of circulating lymphocytes defined by adhesion to mucosal addressin cell adhesion molecule-1 - Comparison with vascular cell adhesion molecule-1 and correlation with beta(7) integrins and memory differentiation** *JOURNAL OF IMMUNOLOGY*  
Rott, L. S., Briskin, M. J., Andrew, D. P., BERG, E. L., BUTCHER, E. C.  
1996; 156 (10): 3727-3736
  - **Differential expression of homing molecules on recirculating lymphocytes from sheep gut, peripheral, and lung lymph** *JOURNAL OF IMMUNOLOGY*  
Abitorabi, M. A., Mackay, C. R., Jerome, E. H., Osorio, O., BUTCHER, E. C., Erle, D. J.  
1996; 156 (9): 3111-3117
  - **CD34-deficient mice have reduced eosinophil accumulation after allergen exposure and show a novel crossreactive 90-kD protein** *BLOOD*  
Suzuki, A., Andrew, D. P., Gonzalo, J. A., Fukumoto, M., Spellberg, J., Hashiyama, M., Takimoto, H., Gerwin, N., Webb, I., Molineux, G., Amakawa, R., Tada, Y., Wakeham, et al  
1996; 87 (9): 3550-3562
  - **Lymphocyte homing and homeostasis** *SCIENCE*  
BUTCHER, E. C., Picker, L. J.  
1996; 272 (5258): 60-66
  - **Distribution of alpha(4)beta(7) and alpha(E)beta(7) integrins on thymocytes, intestinal epithelial lymphocytes and peripheral lymphocytes** *EUROPEAN JOURNAL OF IMMUNOLOGY*  
Andrew, D. P., Rott, L. S., Kilshaw, P. J., BUTCHER, E. C.  
1996; 26 (4): 897-905
  - **Expression of monocyte chemoattractant protein-1 and interleukin-8 receptors on subsets of T cells: Correlation with transendothelial chemotactic potential** *EUROPEAN JOURNAL OF IMMUNOLOGY*  
Qin, S. X., LaRosa, G., Campbell, J. J., SmithHeath, H., Kassam, N., Shi, X. J., Zeng, L., BUTCHER, E. C., Mackay, C. R.  
1996; 26 (3): 640-647
  - **Role of Rho in chemoattractant-activated leukocyte adhesion through integrins** *SCIENCE*  
Laudanna, C., Campbell, J. J., BUTCHER, E. C.  
1996; 271 (5251): 981-983
  - **Structural requirements for mucosal vascular addressin binding to its lymphocyte receptor alpha(4)beta(7) - Common themes among integrin-Ig family interactions** *JOURNAL OF IMMUNOLOGY*  
Briskin, M. J., Rott, L., BUTCHER, E. C.  
1996; 156 (2): 719-726
  - **Generalized and compartmentalized mucosal immune responses in humans: Cellular and molecular aspects** *8th International Congress of Mucosal Immunology*  
QUIDINGJARBRINK, M., Eriksson, K., Lakew, M., Butcher, E., Banchereau, J., Lazarovits, A., Holmgren, J., Cerkinsky, C.  
ACADEMIC PRESS INC.1996: 477-487
  - **INHIBITION OF T-CELL COSTIMULATION BY VCAM-1 PREVENTS MURINE GRAFT-VERSUS-HOST DISEASE ACROSS MINOR HISTOCOMPATIBILITY BARRIERS** *JOURNAL OF IMMUNOLOGY*

Schlegel, P. G., Vaysburd, M., Chen, Y. F., BUTCHER, E. C., Chao, N. J.  
1995; 155 (8): 3856-3865

• **HEAT-STABLE ANTIGEN (MOUSE CD24) SUPPORTS MYELOID CELL-BINDING TO ENDOTHELIAL AND PLATELET P-SELECTIN** *INTERNATIONAL IMMUNOLOGY*

Aigner, S., Ruppert, M., Hubbe, M., Sammar, M., Sthoeger, Z., BUTCHER, E. C., VESTWEBER, D., Altevogt, P.  
1995; 7 (10): 1557-1565

• **A CENTRAL ROLE FOR MICROVILLOUS RECEPTOR PRESENTATION IN LEUKOCYTE ADHESION UNDER FLOW CELL**

VONANDRIAN, U. H., HASSEN, S. R., Nelson, R. D., Erlandsen, S. L., BUTCHER, E. C.  
1995; 82 (6): 989-999

• **SOLUBLE L-SELECTIN (SCD62L) UMBILICAL-CORD PLASMA-LEVELS INCREASE WITH GESTATIONAL-AGE** *PEDIATRIC RESEARCH*

Buhrer, C., Stibenz, D., Graulich, J., GERNHOLD, U., BUTCHER, E. C., Dudenhausen, J. W., Obladen, M.  
1995; 38 (3): 336-341

• **EXPRESSION OF THE MUCOSAL VASCULAR ADDRESSIN, MADCAM-1 - ON SINUS-LINING CELLS IN THE SPLEEN** *AMERICAN JOURNAL OF PATHOLOGY*

Kraal, G., Schornagel, K., STREETER, P. R., Holzmann, B., BUTCHER, E. C.  
1995; 147 (3): 763-771

• **ORGANIZATION, REGULATORY SEQUENCES, AND ALTERNATIVELY SPLICED TRANSCRIPTS OF THE MUCOSAL ADDRESSIN CELL-ADHESION MOLECULE-1 (MADCAM-1) GENE** *JOURNAL OF IMMUNOLOGY*

SAMPAIO, S. O., Li, X., Takeuchi, M., Mei, C., FRANCKE, U., BUTCHER, E. C., Briskin, M. J.  
1995; 155 (5): 2477-2486

• **TABS, A T-CELL ACTIVATION ANTIGEN THAT INDUCES LFA-1-DEPENDENT AGGREGATION** *JOURNAL OF IMMUNOLOGY*

Andrew, D. P., Yoshino, T., GUH, L., MARTINSIMONET, M. T., BUTCHER, E. C.  
1995; 155 (4): 1671-1684

• **THE ALPHA-4 INTEGRIN CHAIN IS A LIGAND FOR ALPHA-4-BETA-7 AND ALPHA-4-BETA-1** *JOURNAL OF EXPERIMENTAL MEDICINE*

Altevogt, P., Hubbe, M., Ruppert, M., Lohr, J., VONHOEGEN, P., Sammar, M., Andrew, D. P., McEvoy, L., Humphries, M. J., BUTCHER, E. C.  
1995; 182 (2): 345-355

• **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

• **SPATIAL-DISTRIBUTION OF L-SELECTIN (CD62L) HUMAN-LYMPHOCYTES AND TRANSFECTED MURINE L1-2 CELLS** *HISTOCHEMICAL JOURNAL*

HASSEN, S. R., VONANDRIAN, U. H., BUTCHER, E. C., Nelson, R. D., Erlandsen, S. L.  
1995; 27 (7): 547-554

• **DISTINCT ROLES OF L-SELECTIN AND INTEGRINS ALPHA-4-BETA-7 AND LFA-1 IN LYMPHOCYTE HOMING TO PEYERS PATCH-HEV IN-SITU - THE MULTISTEP MODEL CONFIRMED AND REFINED IMMUNITY**

BARGATZE, R. F., JUTILA, M. A., BUTCHER, E. C.  
1995; 3 (1): 99-108

• **PRIMITIVE HUMAN HEMATOPOIETIC PROGENITORS ADHERE TO P-SELECTIN (CD62P)** *BLOOD*

Zannettino, A. C., Berndt, M. C., Butcher, C., BUTCHER, E. C., Vadas, M. A., Simmons, P. J.  
1995; 85 (12): 3466-3477

• **LAMININ MEDIATES AGGREGATION OF CD31-TRANSFECTED CELLS**

Zehnder, J. L., BUTCHER, E. C., Leung, L. L.  
SCHATTAUER GMBH-VERLAG MEDIZIN NATURWISSENSCHAFTEN.1995: 1153-53

• **ROLLING OF LYMPHOCYTES AND NEUTROPHILS ON PERIPHERAL NODE ADDRESSIN AND SUBSEQUENT ARREST ON ICAM-1 IN SHEAR-FLOW** *EUROPEAN JOURNAL OF IMMUNOLOGY*

Lawrence, M. B., BERG, E. L., BUTCHER, E. C., Springer, T. A.  
1995; 25 (4): 1025-1031

- **NOVEL MOUSE ENDOTHELIAL-CELL SURFACE MARKER IS SUPPRESSED DURING DIFFERENTIATION OF THE BLOOD-BRAIN-BARRIER DEVELOPMENTAL DYNAMICS**  
Hallmann, R., MAYER, D. N., BERG, E. L., Broermann, R., BUTCHER, E. C.  
1995; 202 (4): 325-332
- **LYMPHOCYTES INFILTRATING THE CNS DURING INFLAMMATION DISPLAY A DISTINCTIVE PHENOTYPE AND BIND TO VCAM-1 BUT NOT TO MADCAM-1** *INTERNATIONAL IMMUNOLOGY*  
Engelhardt, B., CONLEY, F. K., Kilshaw, P. J., BUTCHER, E. C.  
1995; 7 (3): 481-491
- **ALPHA-4 INTEGRINS MEDIATE LYMPHOCYTE ATTACHMENT AND ROLLING UNDER PHYSIOLOGICAL FLOW** *CELL*  
Berlin, C., BARGATZE, R. F., Campbell, J. J., VONANDRIAN, U. H., SZABO, M. C., HASSLEN, S. R., Nelson, R. D., BERG, E. L., Erlandsen, S. L., BUTCHER, E. C.  
1995; 80 (3): 413-422
- **HUMAN CIRCULATING SPECIFIC ANTIBODY-FORMING-CELLS AFTER SYSTEMIC AND MUCOSAL IMMUNIZATIONS - DIFFERENTIAL HOMING COMMITMENTS AND CELL-SURFACE DIFFERENTIATION MARKERS** *EUROPEAN JOURNAL OF IMMUNOLOGY*  
QUIDINGJARBRINK, M., Lakew, M., Nordstrom, I., Banchereau, J., Butcher, E., Holmgren, J., Cerkinsky, C.  
1995; 25 (2): 322-327
- **DUAL BINDING-CAPACITY OF MUCOSAL IMMUNOBLASTS TO MUCOSAL AND SYNOVIAL ENDOTHELIUM IN HUMANS - DISSECTION OF THE MOLECULAR MECHANISMS** *JOURNAL OF EXPERIMENTAL MEDICINE*  
SALMI, M., Andrew, D. P., BUTCHER, E. C., JALKANEN, S.  
1995; 181 (1): 137-149
- **Phenotypic characterization of antibody-secreting cells after systemic immunizations in humans** *7th International Congress of Mucosal Immunology*  
Lakew, M., Nordstrom, I., QUIDING, M., Holmgren, J., Butcher, E., Cerkinsky, C.  
PLENUM PRESS DIV PLENUM PUBLISHING CORP. 1995: 1451-1453
- **Induction of specific immunity at mucosal surfaces: prospects for vaccine development.** *Advances in experimental medicine and biology*  
Cerkinsky, C., QUIDING, M., Eriksson, K., Nordström, I., Lakew, M., Wenerås, C., Kilander, A., Björck, S., Svennerholm, A. M., Butcher, E.  
1995; 371B: 1409-1416
- **Induction of specific immunity at mucosal surfaces: Prospects for vaccine development** *7th International Congress of Mucosal Immunology*  
Cerkinsky, C., QUIDING, M., Eriksson, K., Nordstrom, I., Lakew, M., WENERAS, C., Kilander, A., Bjorck, S., Svennerholm, A. M., Butcher, E., Holmgren, J.  
PLENUM PRESS DIV PLENUM PUBLISHING CORP. 1995: 1409-1416
- **Phenotypic characterization of circulating antibody-secreting cells after mucosal and systemic immunizations in humans.** *Advances in experimental medicine and biology*  
Lakew, M., Nordström, I., QUIDING, M., Holmgren, J., Butcher, E., Cerkinsky, C.  
1995; 371B: 1451-1453
- **SULFATION-DEPENDENT RECOGNITION OF HIGH ENDOTHELIAL VENULES (HEV)-LIGANDS BY L-SELECTIN AND MECA-79, AN ADHESION-BLOCKING MONOClonal-ANTIBODY** *JOURNAL OF EXPERIMENTAL MEDICINE*  
Hemmerich, S., BUTCHER, E. C., ROSEN, S. D.  
1994; 180 (6): 2219-2226
- **L-SELECTIN AND VERY LATE ANTIGEN-4 INTEGRIN PROMOTE EOSINOPHIL ROLLING AT PHYSIOLOGICAL SHEAR RATES IN-VIVO** *JOURNAL OF IMMUNOLOGY*  
Sriramarao, P., VONANDRIAN, U. H., BUTCHER, E. C., Bourdon, M. A., Broide, D. H.  
1994; 153 (9): 4238-4246
- **NEUTROPHILS ROLL ON ADHERENT NEUTROPHILS BOUND TO CYTOKINE-INDUCED ENDOTHELIAL-CELLS VIA L-SELECTIN ON THE ROLLING CELLS** *JOURNAL OF EXPERIMENTAL MEDICINE*  
BARGATZE, R. F., Kurk, S., BUTCHER, E. C., JUTILA, M. A.  
1994; 180 (5): 1785-1792
- **DISTINCT BUT OVERLAPPING EPITOPIES ARE INVOLVED IN ALPHA(4)BETA(7)-MEDIATED ADHESION TO VASCULAR CELL-ADHESION MOLECULE-1, MUCOSAL ADDRESSIN-1, FIBRONECTIN, AND LYMPHOCYTE AGGREGATION** *JOURNAL OF IMMUNOLOGY*  
Andrew, D. P., Berlin, C., Honda, S., Yoshino, T., Hamann, A., Holzmann, B., Kilshaw, P. J., BUTCHER, E. C.  
1994; 153 (9): 3847-3851

- **E-SELECTIN MEDIATES LEUKOCYTE ROLLING IN INTERLEUKIN-1-TREATED RABBIT MESENTERY VENULES** *BLOOD*  
Olofsson, A. M., Arfors, K. E., Ramezani, L., WOLITZKY, B. A., BUTCHER, E. C., VONANDRIAN, U. H.  
1994; 84 (8): 2749-2758
- **EXPRESSION AND FUNCTION OF THE MADCAM-1 RECEPTOR, INTEGRIN ALPHA-4-BETA-7, ON HUMAN-LEUKOCYTES** *JOURNAL OF IMMUNOLOGY*  
Erle, D. J., Briskin, M. J., BUTCHER, E. C., GARCIAPIARDO, A., Lazarovits, A. I., Tidswell, M.  
1994; 153 (2): 517-528
- **EVIDENCE FOR INVOLVEMENT OF ICAM-1 AND VCAM-1 IN LYMPHOCYTE INTERACTION WITH ENDOTHELIUM IN EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS IN THE CENTRAL-NERVOUS-SYSTEM IN THE SJL/J MOUSE** *AMERICAN JOURNAL OF PATHOLOGY*  
Steffen, B. J., BUTCHER, E. C., Engelhardt, B.  
1994; 145 (1): 189-201
- **ENHANCED ENDOTHELIAL ADHESIVENESS IN HYPERCHOLESTEROLEMIA IS ATTENUATED BY L-ARGININE** *CIRCULATION*  
Tsao, P. S., McEvoy, L. M., Drexler, H., BUTCHER, E. C., Cooke, J. P.  
1994; 89 (5): 2176-2182
- **CELL-ADHESION MOLECULES ON VESSELS DURING INFLAMMATION IN THE MOUSE CENTRAL-NERVOUS-SYSTEM** *JOURNAL OF NEUROIMMUNOLOGY*  
Engelhardt, B., CONLEY, F. K., BUTCHER, E. C.  
1994; 51 (2): 199-208
- **LIGAND-INDUCED ADHESION TO ACTIVATED ENDOTHELIUM AND TO VASCULAR CELL-ADHESION MOLECULE-1 IN LYMPHOCYTES TRANSFECTED WITH THE N-FORMYL PEPTIDE RECEPTOR** *JOURNAL OF IMMUNOLOGY*  
Honda, S., Campbell, J. J., Andrew, D. P., Engelhardt, B., Butcher, B. A., Warnock, R. A., Ye, R. D., BUTCHER, E. C.  
1994; 152 (8): 4026-4035
- **ROLE OF ALPHA(4)-INTEGRINS IN LYMPHOCYTE HOMING TO MUCOSAL TISSUES IN-VIVO** *JOURNAL OF IMMUNOLOGY*  
Hamann, A., Andrew, D. P., JABLONSKIWESTRICH, D., Holzmann, B., BUTCHER, E. C.  
1994; 152 (7): 3282-3293
- **CLONING AND EXPRESSION OF A CDNA-ENCODING MOUSE ENDOGGIN, AN ENDOTHELIAL-CELL TGF-BETA LIGAND GENE**  
GE, A. Z., BUTCHER, E. C.  
1994; 138 (1-2): 201-206
- **EXPRESSION OF ENDOTHELIAL-CELL ADHESION MOLECULES IN JOINTS AND HEART DURING BORRELIA-BURGDORFERI INFECTION OF MICE** *CELL ADHESION AND COMMUNICATION*  
Schaible, U. E., VESTWEBER, D., BUTCHER, E. G., Stehle, T., Simon, M. M.  
1994; 2 (6): 465-479
- **L-SELECTIN-MEDIATED LYMPHOCYTE ROLLING ON MADCAM-1** *NATURE*  
BERG, E. L., McEvoy, L. M., Berlin, C., BARGATZE, R. F., BUTCHER, E. C.  
1993; 366 (6456): 695-698
- **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
- **THE PEYER PATCH HIGH ENDOTHELIAL RECEPTOR FOR LYMPHOCYTES, THE MUCOSAL VASCULAR ADDRESSIN, IS INDUCED ON A MURINE ENDOTHELIAL-CELL LINE BY TUMOR-NECROSIS-FACTOR-ALPHA AND IL-1** *JOURNAL OF IMMUNOLOGY*  
Sikorski, E. E., Hallmann, R., BERG, E. L., BUTCHER, E. C.  
1993; 151 (10): 5239-5250
- **SPECIFICITY OF LEUKOCYTE-ENDOTHELIAL INTERACTIONS AND DIAPEDESIS - PHYSIOLOGICAL AND THERAPEUTIC IMPLICATIONS OF AN ACTIVE DECISION-PROCESS** *RESEARCH IN IMMUNOLOGY*  
BUTCHER, E. C.  
1993; 144 (9): 695-698
- **ALPHA-4-BETA-7-INTEGRIN MEDIATES LYMPHOCYTE BINDING TO THE MUCOSAL VASCULAR ADDRESSIN MADCAM-1** *CELL*

- Berlin, C., BERG, E. L., Briskin, M. J., Andrew, D. P., Kilshaw, P. J., Holzmann, B., Weissman, I. L., Hamann, A., BUTCHER, E. C.  
1993; 74 (1): 185-195
- **RAPID G-PROTEIN-REGULATED ACTIVATION EVENT INVOLVED IN LYMPHOCYTE BINDING TO HIGH ENDOTHELIAL VENULES** *JOURNAL OF EXPERIMENTAL MEDICINE*  
BARGATZE, R. F., BUTCHER, E. C.  
1993; 178 (1): 367-372
- **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
- **IN-VIVO DISTRIBUTION AND CHARACTERIZATION OF 2 NOVEL MONONUCLEAR PHAGOCYTE DIFFERENTIATION ANTIGENS IN MICE** *JOURNAL OF LEUKOCYTE BIOLOGY*  
JUTILA, M. A., BERG, E. L., Kroese, F. G., Rott, L., Perry, V., BUTCHER, E. C.  
1993; 54 (1): 30-39
- **MADCAM-1 HAS HOMOLOGY TO IMMUNOGLOBULIN AND MUCIN-LIKE ADHESION RECEPTORS AND TO IGA1** *NATURE*  
Briskin, M. J., McEvoy, L. M., BUTCHER, E. C.  
1993; 363 (6428): 461-464
- **PMN EXTRAVASATION IN ACUTE-INFLAMMATION - A ROLE FOR SELECTIN INTERACTION IN INITIAL PMN-ENDOTHELIAL CELL RECOGNITION** *2ND INTERNATIONAL CONF ON STRUCTURE AND FUNCTION OF MOLECULES INVOLVED IN LEUKOCYTE ADHESION II*  
Picker, L. J., VONANDRIAN, U. H., Burns, A. R., Doerschuk, C. M., Arfors, K. E., BUTCHER, E. C.  
SPRINGER-VERLAG.1993: 151-167
- **AN ANTIBODY THAT PROMOTES ADHESION EVENTS MEDIATED BY BOTH LFA-1 AND CR3** *2ND INTERNATIONAL CONF ON STRUCTURE AND FUNCTION OF MOLECULES INVOLVED IN LEUKOCYTE ADHESION II*  
Robinson, M. K., Andrew, D., Rosen, H., Brown, D., Ortlepp, S., Stephens, P., BUTCHER, E. C.  
SPRINGER-VERLAG.1993: 25-33
- **NEUTROPHIL AGGREGATION IS BETA(2)-INTEGRIN-DEPENDENT AND L-SELECTIN-DEPENDENT IN BLOOD AND ISOLATED CELLS** *JOURNAL OF IMMUNOLOGY*  
Simon, S. I., Chambers, J. D., Butcher, E., Sklar, L. A.  
1992; 149 (8): 2765-2771
- **L-SELECTIN FUNCTION IS REQUIRED FOR BETA-2-INTEGRIN-MEDIATED NEUTROPHIL ADHESION AT PHYSIOLOGICAL SHEAR RATES INVIVO** *AMERICAN JOURNAL OF PHYSIOLOGY*  
VONANDRIAN, U. H., Hansell, P., Chambers, J. D., Berger, E. M., Torres, I., BUTCHER, E. C., Arfors, K. E.  
1992; 263 (4): H1034-H1044
- **H-CAM EXPRESSION IN THE HUMAN NERVOUS-SYSTEM - EVIDENCE FOR A ROLE IN DIVERSE GLIAL INTERACTIONS** *JOURNAL OF NEUROCYTOLOGY*  
Vogel, H., BUTCHER, E. C., Picker, L. J.  
1992; 21 (5): 363-373
- **COMPARISON OF L-SELECTIN AND E-SELECTIN LIGAND SPECIFICITIES - THE L-SELECTIN CAN BIND THE E-SELECTIN LIGANDS SIALYL LEX AND SIALYL LEA** *BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS*  
BERG, E. L., Magnani, J., Warnock, R. A., Robinson, M. K., BUTCHER, E. C.  
1992; 184 (2): 1048-1055
- **ROLE OF INTEGRIN ALPHA-4-BETA-7/ALPHA-4-BETA-P IN LYMPHOCYTE ADHERENCE TO FIBRONECTIN AND VCAM-1 AND IN HOMOTYPIC CELL CLUSTERING** *JOURNAL OF CELL BIOLOGY*  
Ruegg, C., Postigo, A. A., Sikorski, E. E., BUTCHER, E. C., Pytela, R., Erle, D. J.  
1992; 117 (1): 179-189
- **ADHESION-MECHANISMS INVOLVED IN INFLAMMATION IN THE CENTRAL-NERVOUS-SYSTEM (CNS) IN THE MOUSE**  
Engelhardt, B., CONLEY, F. K., BUTCHER, E. C.  
FEDERATION AMER SOC EXP BIOL.1992: A1894-A1894

- **A MONOCLONAL-ANTIBODY AGAINST THE BETA-7 INTEGRIN SUBUNIT MEDIATES CELL-ADHESION ACTIVITIES**  
Sikorski, E. E., Martin, M. T., Postigo, A. A., Erle, D. J., BUTCHER, E. C.  
FEDERATION AMER SOC EXP BIOL.1992: A1143–A1143
- **ANTIBODY AGAINST THE LEU-CAM BETA-CHAIN (CD18) PROMOTES BOTH LFA-1-DEPENDENT AND CR3-DEPENDENT ADHESION EVENTS JOURNAL OF IMMUNOLOGY**  
Robinson, M. K., Andrew, D., Rosen, H., Brown, D., Ortlepp, S., Stephens, P., BUTCHER, E. C.  
1992; 148 (4): 1080-1085
- **PHYSIOLOGICAL AND MOLECULAR MECHANISMS OF LYMPHOCYTE HOMING ANNUAL REVIEW OF IMMUNOLOGY**  
Picker, L. J., BUTCHER, E. C.  
1992; 10: 561-591
- **LEUKOCYTE-ENDOTHELIAL CELL-ADHESION AS AN ACTIVE, MULTISTEP PROCESS - A COMBINATORIAL MECHANISM FOR SPECIFICITY AND DIVERSITY IN LEUKOCYTE TARGETING 4TH INTERNATIONAL CONF ON LYMPHOCYTE ACTIVATION AND IMMUNE REGULATION**  
BUTCHER, E. C.  
PLENUM PRESS DIV PLENUM PUBLISHING CORP.1992: 181–194
- **LEUKOCYTE-ENDOTHELIAL CELL RECOGNITION - 3 (OR MORE) STEPS TO SPECIFICITY AND DIVERSITY CELL**  
BUTCHER, E. C.  
1991; 67 (6): 1033-1036
- **THE CUTANEOUS LYMPHOCYTE ANTIGEN IS A SKIN LYMPHOCYTE HOMING RECEPTOR FOR THE VASCULAR LECTIN ENDOTHELIAL CELL-LEUKOCYTE ADHESION MOLECULE-1 JOURNAL OF EXPERIMENTAL MEDICINE**  
BERG, E. L., Yoshino, T., Rott, L. S., Robinson, M. K., Warnock, R. A., Kishimoto, T. K., Picker, L. J., BUTCHER, E. C.  
1991; 174 (6): 1461-1466
- **DISSECTION OF MURINE LYMPHOCYTE-ENDOTHELIAL CELL-INTERACTION MECHANISMS BY SV-40-TRANSFORMED MOUSE ENDOTHELIAL-CELL LINES - NOVEL MECHANISMS MEDIATING BASAL BINDING, AND ALPHA-4-INTEGRIN-DEPENDENT CYTOKINE-INDUCED ADHESION EXPERIMENTAL CELL RESEARCH**  
Harder, R., Uhlig, H., KASHAN, A., Schutt, B., Duijvestijn, A., BUTCHER, E. C., Thiele, H. G., Hamann, A.  
1991; 197 (2): 259-267
- **THE NEUTROPHIL SELECTIN LECAM-1 PRESENTS CARBOHYDRATE LIGANDS TO THE VASCULAR SELECTINS ELAM-1 AND GMP-140 CELL**  
Picker, L. J., Warnock, R. A., Burns, A. R., Doerschuk, C. M., BERG, E. L., BUTCHER, E. C.  
1991; 66 (5): 921-933
- **LATE TREATMENT WITH ANTI-LFA-1 (CD11A) ANTIBODY PREVENTS CEREBRAL MALARIA IN A MOUSE MODEL EUROPEAN JOURNAL OF IMMUNOLOGY**  
Falanga, P. B., BUTCHER, E. C.  
1991; 21 (9): 2259-2263
- **2-STEP MODEL OF LEUKOCYTE ENDOTHELIAL-CELL INTERACTION IN INFLAMMATION - DISTINCT ROLES FOR LECAM-1 AND THE LEUKOCYTE BETA-2 INTEGRINS INVIVO PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA**  
VONANDRIAN, U. H., Chambers, J. D., McEvoy, L. M., BARGATZE, R. F., Arfors, K. E., BUTCHER, E. C.  
1991; 88 (17): 7538-7542
- **A CARBOHYDRATE DOMAIN COMMON TO BOTH SIALYL LE(A) AND SIALYL LE(X) IS RECOGNIZED BY THE ENDOTHELIAL-CELL LEUKOCYTE ADHESION MOLECULE ELAM-1 JOURNAL OF BIOLOGICAL CHEMISTRY**  
BERG, E. L., Robinson, M. K., MANSSON, O., BUTCHER, E. C., Magnani, J. L.  
1991; 266 (23): 14869-14872
- **ANTIBODIES AGAINST HUMAN NEUTROPHIL LECAM-1 (LAM-1/LEU-8/DREG-56 ANTIGEN) AND ENDOTHELIAL-CELL ELAM-1 INHIBIT A COMMON CD18-INDEPENDENT ADHESION PATHWAY INVITRO BLOOD**  
Kishimoto, T. K., Warnock, R. A., JUTILA, M. A., BUTCHER, E. C., Lane, C., Anderson, D. C., Smith, C. W.  
1991; 78 (3): 805-811
- **THE HUMAN PERIPHERAL LYMPH-NODE VASCULAR ADDRESSIN IS A LIGAND FOR LECAM-1, THE PERIPHERAL LYMPH-NODE HOMING RECEPTOR JOURNAL OF CELL BIOLOGY**

BERG, E. L., Robinson, M. K., Warnock, R. A., BUTCHER, E. C.  
1991; 114 (2): 343-349

• **PERIPHERAL LYMPH-NODE HOMING RECEPTOR (LECAM-1) IMMUNOLOGY TODAY**

Anderson, D. C., BUTCHER, E. C., Gallatin, M., Rosen, S., Kishimoto, K., Lasky, L., Miyasaka, M., Scollay, R., Smith, C. W., Haskard, D.  
1991; 12 (7): 216-216

• **EXPRESSION OF VASCULAR ADDRESSINS AND ICAM-1 BY ENDOTHELIAL-CELLS IN THE SPINAL-CORD DURING CHRONIC RELAPSING EXPERIMENTAL ALLERGIC ENCEPHALOMYELITIS IN THE BIOZZI AB/H MOUSE IMMUNOLOGY**

ONEILL, J. K., Butter, C., Baker, D., Gschmeissner, S. E., Kraal, G., BUTCHER, E. C., TURK, J. L.  
1991; 72 (4): 520-525

• **ELAM-1 IS AN ADHESION MOLECULE FOR SKIN-HOMING T-CELLS NATURE**

Picker, L. J., Kishimoto, T. K., Smith, C. W., Warnock, R. A., BUTCHER, E. C.  
1991; 349 (6312): 796-799

• **CHEMOTACTIC FACTORS REGULATE LECTIN ADHESION MOLECULE 1 (LECAM-1)-DEPENDENT NEUTROPHIL ADHESION TO CYTOKINE-STIMULATED ENDOTHELIAL-CELLS INVITRO JOURNAL OF CLINICAL INVESTIGATION**

Smith, C. W., Kishimoto, T. K., ABBASS, O., Hughes, B., Rothlein, R., McIntire, L. V., Butcher, E., Anderson, D. C.  
1991; 87 (2): 609-618

• **THE PERIPHERAL LYMPH-NODE HOMING RECEPTOR, LECAM-1, IS INVOLVED IN CD18-INDEPENDENT ADHESION OF HUMAN NEUTROPHILS TO ENDOTHELIUM BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS**

Hallmann, R., JUTILA, M. A., Smith, C. W., Anderson, D. C., Kishimoto, T. K., BUTCHER, E. C.  
1991; 174 (1): 236-243

• **RAT B-CELL SUBSETS IDENTIFIED BY FLOW-CYTOMETRY AND THEIR ANATOMICAL COUNTERPARTS 10TH INTERNATIONAL CONF ON LYMPHATIC TISSUES AND GERMINAL CENTRES IN IMMUNE REACTIONS**

Kroese, F. G., Hermans, M. H., DEBOER, N. K., BUTCHER, E. C., Herzenberg, L. A.  
MARCEL DEKKER.1991: 397-402

• **THE HYALURONATE RECEPTOR IS A MEMBER OF THE CD44 (H-CAM) FAMILY OF CELL-SURFACE GLYCOPROTEINS JOURNAL OF CELL BIOLOGY**

Culty, M., Miyake, K., Kincade, P. W., SILORSKI, E., BUTCHER, E. C., Underhill, C.  
1990; 111 (6): 2765-2774

• **IDENTIFICATION OF MESSENGER-RNA THAT ENCODES AN ALTERNATIVE FORM OF H-CAM(CD44) IN LYMPHOID AND NONLYMPHOID TISSUES IMMUNOGENETICS**

GOLDSTEIN, L. A., BUTCHER, E. C.  
1990; 32 (6): 389-397

• **DIFFERENTIAL EXPRESSION OF HOMING-ASSOCIATED ADHESION MOLECULES BY T-CELL SUBSETS IN MAN JOURNAL OF IMMUNOLOGY**

Picker, L. J., Terstappen, L. W., Rott, L. S., STREETER, P. R., Stein, H., BUTCHER, E. C.  
1990; 145 (10): 3247-3255

• **THE RAT B-CELL SYSTEM - THE ANATOMICAL LOCALIZATION OF FLOW CYTOMETRY-DEFINED B-CELL SUBPOPULATIONS EUROPEAN JOURNAL OF IMMUNOLOGY**

Kroese, F. G., BUTCHER, E. C., Lalor, P. A., STALL, A. M., Herzenberg, L. A.  
1990; 20 (7): 1527-1534

• **REGULATION AND LECTIN ACTIVITY OF THE HUMAN NEUTROPHIL PERIPHERAL LYMPH-NODE HOMING RECEPTOR BLOOD**

JUTILA, M. A., Kishimoto, T. K., BUTCHER, E. C.  
1990; 76 (1): 178-183

• **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

• **EXPRESSION OF LOW-LEVELS OF PERIPHERAL LYMPH NODE-ASSOCIATED VASCULAR ADDRESSIN IN MUCOSAL LYMPHOID-TISSUES - POSSIBLE RELEVANCE TO THE DISSEMINATION OF PASSAGED AKR LYMPHOMAS JOURNAL OF CELLULAR BIOCHEMISTRY**

- BARGATZE, R. F., STREETER, P. R., BUTCHER, E. C.  
1990; 42 (4): 219-227
- **IDENTIFICATION OF A HUMAN PERIPHERAL LYMPH-NODE HOMING RECEPTOR - A RAPIDLY DOWN-REGULATED ADHESION MOLECULE** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Kishimoto, T. K., JUTILA, M. A., BUTCHER, E. C.  
1990; 87 (6): 2244-2248
  - **HEMATOPOIETIC PROGENITOR-CELL EXPRESSION OF THE H-CAM (CD44) HOMING-ASSOCIATED ADHESION MOLECULE** *BLOOD*  
LEWINSOHN, D. M., Nagler, A., Ginzton, N., Greenberg, P., BUTCHER, E. C.  
1990; 75 (3): 589-595
  - **Warner-Lambert/Parke-Davis Award lecture. Cellular and molecular mechanisms that direct leukocyte traffic.** *American journal of pathology*  
BUTCHER, E. C.  
1990; 136 (1): 3-11
  - **HOMING RECEPTORS IN LYMPHOCYTE, NEUTROPHIL, AND MONOCYTE INTERACTION WITH ENDOTHELIAL-CELLS** *1ST INTERNATIONAL CONF ON STRUCTURE, FUNCTION AND REGULATION OF MOLECULES INVOLVED IN LEUKOCYTE ADHESION*  
JUTILA, M. A., LEWINSOHN, D. M., BERG, E. L., BUTCHER, E. C.  
SPRINGER-VERLAG.1990: 227-235
  - **LYMPHOCYTE HOMING RECEPTORS AND VASCULAR ADDRESSINS** *SYMP ON GLYCOBIOLOGY*  
BERG, E. L., GOLDSTEIN, L. A., Picker, L. J., STREETER, P. R., JUTILA, M. A., BARGATZE, R. F., ZHOU, D. F., BUTCHER, E. C.  
WILEY-LISS, INC.1990: 91-105
  - **FUNCTION AND REGULATION OF THE NEUTROPHIL MEL-14 ANTIGEN INVIVO - COMPARISON WITH LFA-1 AND MAC-1** *JOURNAL OF IMMUNOLOGY*  
JUTILA, M. A., Rott, L., BERG, E. L., BUTCHER, E. C.  
1989; 143 (10): 3318-3324
  - **MOLECULAR-CLONING AND EXPRESSION OF PGP-1 - THE MOUSE HOMOLOG OF THE HUMAN H-CAM (HERMES) LYMPHOCYTE HOMING RECEPTOR** *JOURNAL OF IMMUNOLOGY*  
ZHOU, D. F., Ding, J. F., Picker, L. J., BARGATZE, R. F., BUTCHER, E. C., Goeddel, D. V.  
1989; 143 (10): 3390-3395
  - **INDUCIBLE EXPRESSION OF AN ENDOTHELIAL-CELL ANTIGEN ON MURINE MYOCARDIAL VASCULATURE IN ASSOCIATION WITH INTERSTITIAL CELLULAR INFILTRATION** *TRANSPLANTATION*  
LEPPINK, D. M., Bishop, D. K., Sedmak, D. D., Henry, M. L., Ferguson, R. M., STREETER, P. R., BUTCHER, E. C., Orosz, C. G.  
1989; 48 (5): 874-877
  - **INFLAMMATION-INDUCED ENDOTHELIAL-CELL ADHESION TO LYMPHOCYTES, NEUTROPHILS, AND MONOCYTES - ROLE OF HOMING RECEPTORS AND OTHER ADHESION MOLECULES** *TRANSPLANTATION*  
JUTILA, M. A., BERG, E. L., Kishimoto, T. K., Picker, L. J., BARGATZE, R. F., Bishop, D. K., Orosz, C. G., WU, N. W., BUTCHER, E. C.  
1989; 48 (5): 727-731
  - **NEUTROPHIL MAC-1 AND MEL-14 ADHESION PROTEINS INVERSELY REGULATED BY CHEMOTACTIC FACTORS** *SCIENCE*  
Kishimoto, T. K., JUTILA, M. A., BERG, E. L., BUTCHER, E. C.  
1989; 245 (4923): 1238-1241
  - **MONOCLONAL-ANTIBODIES TO HUMAN-LYMPHOCYTE HOMING RECEPTORS DEFINE A NOVEL CLASS OF ADHESION MOLECULES ON DIVERSE CELL-TYPES** *JOURNAL OF CELL BIOLOGY*  
Picker, L. J., NAKACHE, M., BUTCHER, E. C.  
1989; 109 (2): 927-937
  - **FLOW CYTOMETRIC ANALYSIS OF THE HERMES HOMING-ASSOCIATED ANTIGEN ON HUMAN-LYMPHOCYTE SUBSETS** *BLOOD*  
DELOSTOYOS, J., JALKANEN, S., BUTCHER, E. C.  
1989; 74 (2): 751-760
  - **STRUCTURAL HOMOLOGY BETWEEN LYMPHOCYTE RECEPTORS FOR HIGH ENDOTHELIUM AND CLASS-III EXTRACELLULAR-MATRIX RECEPTOR** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Gallatin, W. M., Wayner, E. A., Hoffman, P. A., STJOHN, T., BUTCHER, E. C., Carter, W. G.

1989; 86 (12): 4654-4658

• **HOMING RECEPTORS AND VASCULAR ADDRESSINS - CELL-ADHESION MOLECULES THAT DIRECT LYMPHOCYTE TRAFFIC** *IMMUNOLOGICAL REVIEWS*

BERG, E. L., GOLDSTEIN, L. A., JUTILA, M. A., NAKACHE, M., Picker, L. J., STREETER, P. R., WU, N. W., Zhou, D., BUTCHER, E. C.  
1989; 108: 5-18

• **A HUMAN-LYMPHOCYTE HOMING RECEPTOR, THE HERMES ANTIGEN, IS RELATED TO CARTILAGE PROTEOGLYCAN CORE AND LINK PROTEINS** *CELL*

GOLDSTEIN, L. A., ZHOU, D. F., Picker, L. J., MINTY, C. N., BARGATZE, R. F., Ding, J. F., BUTCHER, E. C.  
1989; 56 (6): 1063-1072

• **MONOCLONAL-ANTIBODIES AGAINST THE CD44 [IN(LU)-RELATED P80], AND PGP-1 ANTIGENS IN MAN RECOGNIZE THE HERMES CLASS OF LYMPHOCYTE HOMING RECEPTORS** *JOURNAL OF IMMUNOLOGY*

Picker, L. J., TOYOS, J. D., Telen, M. J., HAYNES, B. F., BUTCHER, E. C.  
1989; 142 (6): 2046-2051

• **THE MUCOSAL VASCULAR ADDRESSIN IS A TISSUE-SPECIFIC ENDOTHELIAL-CELL ADHESION MOLECULE FOR CIRCULATING LYMPHOCYTES** *NATURE*

NAKACHE, M., BERG, E. L., STREETER, P. R., BUTCHER, E. C.  
1989; 337 (6203): 179-181

• **HUMAN LAMINA PROPRIA LYMPHOCYTES BEAR HOMING RECEPTORS AND BIND SELECTIVELY TO MUCOSAL LYMPHOID HIGH ENDOTHELIUM** *EUROPEAN JOURNAL OF IMMUNOLOGY*

JALKANEN, S., NASH, G. S., DELOSTOYOS, J., MacDermott, R. P., BUTCHER, E. C.  
1989; 19 (1): 63-68

• **Many of the IgA producing plasma cells in murine gut are derived from self-replenishing precursors in the peritoneal cavity** *INTERNATIONAL IMMUNOLOGY*

Kroese, F. G., Butcher, E. C., Stall, A. M., Lalor, P. A., Adams, S., Herzenberg, L. A.  
1989; 1 (1): 75-84

• **Many of the IgA producing plasma cells in murine gut are derived from self-replenishing precursors in the peritoneal cavity.** *International immunology*

Kroese, F. G., BUTCHER, E. C., STALL, A. M., Lalor, P. A., Adams, S., Herzenberg, L. A.  
1989; 1 (1): 75-84

• **A MAJOR PERITONEAL RESERVOIR OF PRECURSORS FOR INTESTINAL IGA PLASMA-CELLS** *IMMUNOLOGICAL INVESTIGATIONS*

Kroese, F. G., BUTCHER, E. C., STALL, A. M., Herzenberg, L. A.  
1989; 18 (1-4): 47-58

• **LY-6C IS A MONOCYTE MACROPHAGE AND ENDOTHELIAL-CELL DIFFERENTIATION ANTIGEN REGULATED BY INTERFERON-GAMMA** *EUROPEAN JOURNAL OF IMMUNOLOGY*

JUTILA, M. A., Kroese, F. G., Jutila, K. L., STALL, A. M., Fiering, S., Herzenberg, L. A., BERG, E. L., BUTCHER, E. C.  
1988; 18 (11): 1819-1826

• **EVOLUTIONARY CONSERVATION OF TISSUE-SPECIFIC LYMPHOCYTE ENDOTHELIAL-CELL RECOGNITION MECHANISMS INVOLVED IN LYMPHOCYTE HOMING** *JOURNAL OF CELL BIOLOGY*

WU, N. W., JALKANEN, S., STREETER, P. R., BUTCHER, E. C.  
1988; 107 (5): 1845-1851

• **IMMUNOHISTOLOGIC AND FUNCTIONAL-CHARACTERIZATION OF A VASCULAR ADDRESSIN INVOLVED IN LYMPHOCYTE HOMING INTO PERIPHERAL LYMPH-NODES** *JOURNAL OF CELL BIOLOGY*

STREETER, P. R., ROUSE, B. T., BUTCHER, E. C.  
1988; 107 (5): 1853-1862

• **BIOCHEMICAL-PROPERTIES OF GLYCOPROTEINS INVOLVED IN LYMPHOCYTE RECOGNITION OF HIGH ENDOTHELIAL VENULES IN MAN** *JOURNAL OF IMMUNOLOGY*

JALKANEN, S., JALKANEN, M., BARGATZE, R., TAMMI, M., BUTCHER, E. C.  
1988; 141 (5): 1615-1623

• **MEMORY B-CELLS EXPRESS A PHENOTYPE CONSISTENT WITH MIGRATORY COMPETENCE AFTER SECONDARY BUT NOT SHORT-TERM PRIMARY IMMUNIZATION** *CELLULAR IMMUNOLOGY*

- Kraal, G., Weissman, I. L., BUTCHER, E. C.  
1988; 115 (1): 78-87
- **A FLUOROMETRIC APPROACH TO THE QUANTITATION OF CELL NUMBER WITH APPLICATION TO A CELL-ADHESION ASSAY JOURNAL OF IMMUNOLOGICAL METHODS**  
LEWINSOHN, D. M., Nickoloff, B. J., BUTCHER, E. C.  
1988; 110 (1): 93-100
  - **SPIROCHETAL ANTIGENS AND LYMPHOID-CELL SURFACE-MARKERS IN LYME SYNOVITIS - COMPARISON WITH RHEUMATOID SYNOVIA AND TONSILLAR LYMPHOID-TISSUE ARTHRITIS AND RHEUMATISM**  
STEERE, A. C., Duray, P. H., BUTCHER, E. C.  
1988; 31 (4): 487-495
  - **SELECTIVE RECOGNITION OF MUCOSAL LYMPHOID HIGH ENDOTHELIUM BY GUT INTRAEPITHELIAL LEUKOCYTES GASTROENTEROLOGY**  
Schmitz, M., Nunez, D., BUTCHER, E. C.  
1988; 94 (3): 576-581
  - **EXPRESSION OF LYMPHOCYTE HOMING RECEPTOR ANTIGEN IN NON-HODGKINS LYMPHOMA AMERICAN JOURNAL OF PATHOLOGY**  
Picker, L. J., Medeiros, L. J., Weiss, L. M., Warnke, R. A., BUTCHER, E. C.  
1988; 130 (3): 496-504
  - **REGULATION OF LYMPHOCYTE HOMING .1. ALTERATIONS IN HOMING RECEPTOR EXPRESSION AND ORGAN-SPECIFIC HIGH ENDOTHELIAL VENULE BINDING OF LYMPHOCYTES UPON ACTIVATION JOURNAL OF IMMUNOLOGY**  
Hamann, A., JABLONSKIWESTRICH, D., SCHOLZ, K. U., Duijvestijn, A., BUTCHER, E. C., Thiele, H. G.  
1988; 140 (3): 737-743
  - **EVIDENCE FOR AN ACCESSORY ROLE OF LFA-1 IN LYMPHOCYTE-HIGH ENDOTHELIUM INTERACTION DURING HOMING JOURNAL OF IMMUNOLOGY**  
Hamann, A., JABLONSKIWESTRICH, D., Duijvestijn, A., BUTCHER, E. C., Baisch, H., Harder, R., Thiele, H. G.  
1988; 140 (3): 693-699
  - **A TISSUE-SPECIFIC ENDOTHELIAL-CELL MOLECULE INVOLVED IN LYMPHOCYTE HOMING NATURE**  
STREETER, P. R., BERG, E. L., ROUSE, B. T., BARGATZE, R. F., BUTCHER, E. C.  
1988; 331 (6151): 41-46
  - **Expression and regulation of an antigen specific for endothelium involved in human lymphocyte homing.** *Advances in experimental medicine and biology*  
HORST, E., PALS, S. T., DUIJVESTIJN, A. M., von Mourik, J., Kraal, G., BUTCHER, E. C., Meijer, C. J.  
1988; 237: 477-484
  - **Lymphocyte migration molecules.** *Advances in experimental medicine and biology*  
JALKANEN, S., BARGATZE, R., JALKANEN, M., Lewinsohn, D., STREETER, P., LAKEY, E., BUTCHER, E. C.  
1988; 237: 21-29
  - **Regulation of functional and morphological aspects of high endothelium in mouse.** *Advances in experimental medicine and biology*  
DUIJVESTIJN, A. M., Rep, M., BUTCHER, E. C., Hendriks, H. R., Kraal, G.  
1988; 237: 491-497
  - **LYMPHOCYTE AND ENDOTHELIAL-CELL RECOGNITION ELEMENTS THAT CONTROL LYMPHOCYTE TRAFFIC TO MUCOSA-ASSOCIATED LYMPHATIC TISSUES MONOGRAPHS IN ALLERGY**  
JALKANEN, S., STREETER, P., LAKEY, E., BARGATZE, R., BUTCHER, E. C.  
1988; 24: 144-149
  - **HOMING RECEPTORS AND METASTASIS ADVANCES IN CANCER RESEARCH**  
SHER, B. T., BARGATZE, R., Holzmann, B., Gallatin, W. M., MATTHEWS, D., Wu, N., PICKER, L., BUTCHER, E. C., Weissman, I. L.  
1988; 51: 361-390
  - **HIGH ENDOTHELIAL DIFFERENTIATION IN HUMAN LYMPHOID AND INFLAMMATORY TISSUES DEFINED BY MONOCLONAL-ANTIBODY HECA-452 AMERICAN JOURNAL OF PATHOLOGY**  
DUIJVESTIJN, A. M., HORST, E., PALS, S. T., ROUSE, B. N., STEERE, A. C., Picker, L. J., Meijer, C. J., BUTCHER, E. C.  
1988; 130 (1): 147-155

- RECOMBINANT GAMMA-INTERFERON INCREASES THE BINDING OF PERIPHERAL-BLOOD MONONUCLEAR LEUKOCYTES AND A LEU-3+ LYMPHOCYTE-T CLONE TO CULTURED KERATINOCYTES AND TO A MALIGNANT CUTANEOUS SQUAMOUS CARCINOMA CELL-LINE THAT IS BLOCKED BY ANTIBODY AGAINST THE LFA-1 MOLECULE *JOURNAL OF INVESTIGATIVE DERMATOLOGY*  
Nickoloff, B. J., LEWINSOHN, D. M., BUTCHER, E. C., KRENSKY, A. M., CLAYBERGER, C.  
1988; 90 (1): 17-22
- ENHANCED BINDING OF PERIPHERAL-BLOOD MONONUCLEAR LEUKOCYTES TO GAMMA-INTERFERON-TREATED CULTURED KERATINOCYTES *AMERICAN JOURNAL OF DERMATOPATHOLOGY*  
Nickoloff, B. J., LEWINSOHN, D. M., BUTCHER, E. C.  
1987; 9 (5): 413-418
- HIGH ENDOTHELIAL VENULE BINDING AS A PREDICTOR OF THE DISSEMINATION OF PASSAGED MURINE LYMPHOMAS *JOURNAL OF EXPERIMENTAL MEDICINE*  
BARGATZE, R. F., WU, N. W., Weissman, I. L., BUTCHER, E. C.  
1987; 166 (4): 1125-1131
- LYMPHOCYTE RECOGNITION OF HIGH ENDOTHELIUM - ANTIBODIES TO DISTINCT EPITOPIES OF AN 85-95-KD GLYCOPROTEIN ANTIGEN DIFFERENTIALLY INHIBIT LYMPHOCYTE BINDING TO LYMPH-NODE, MUCOSAL, OR SYNOVIAL ENDOTHELIAL-CELLS *JOURNAL OF CELL BIOLOGY*  
JALKANEN, S., BARGATZE, R. F., DELOSTOYOS, J., BUTCHER, E. C.  
1987; 105 (2): 983-990
- LEUKOCYTE-ENDOTHELIAL CELL RECOGNITION - EVIDENCE OF A COMMON MOLECULAR MECHANISM SHARED BY NEUTROPHILS, LYMPHOCYTES, AND OTHER LEUKOCYTES *JOURNAL OF IMMUNOLOGY*  
LEWINSOHN, D. M., BARGATZE, R. F., BUTCHER, E. C.  
1987; 138 (12): 4313-4321
- RECEPTORS INVOLVED IN LYMPHOCYTE HOMING - RELATIONSHIP BETWEEN A CARBOHYDRATE-BINDING RECEPTOR AND THE MEL-14 ANTIGEN *JOURNAL OF CELL BIOLOGY*  
YEDNOCK, T. A., BUTCHER, E. C., Stoolman, L. M., ROSEN, S. D.  
1987; 104 (3): 725-731
- LYMPHOID TISSUE-SPECIFIC AND INFLAMMATION-SPECIFIC ENDOTHELIAL-CELL DIFFERENTIATION DEFINED BY MONOCLONAL-ANTIBODIES *JOURNAL OF IMMUNOLOGY*  
DUIJVESTIJN, A. M., KERKHOVE, M., BARGATZE, R. F., BUTCHER, E. C.  
1987; 138 (3): 713-719
- THE CORRELATION OF LECTIN-STIMULATED PROLIFERATION AND CYTOTOXICITY IN MURINE THYMOCYTES WITH EXPRESSION OF THE MEL-14-DEFINED HOMING RECEPTOR *JOURNAL OF IMMUNOLOGY*  
Wilson, A., Scollay, R., REICHERT, R. A., BUTCHER, E. C., Weissman, I. L., Shortman, K.  
1987; 138 (2): 352-357
- HUMAN-LYMPHOCYTE AND LYMPHOMA HOMING RECEPTORS *ANNUAL REVIEW OF MEDICINE*  
JALKANEN, S., Wu, N., BARGATZE, R. F., BUTCHER, E. C.  
1987; 38: 467-476
- INTERFERON-GAMMA REGULATES AN ANTIGEN SPECIFIC FOR ENDOTHELIAL-CELLS INVOLVED IN LYMPHOCYTE TRAFFIC *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
DUIJVESTIJN, A. M., SCHREIBER, A. B., BUTCHER, E. C.  
1986; 83 (23): 9114-9118
- A LYMPHOID-CELL SURFACE GLYCOPROTEIN INVOLVED IN ENDOTHELIAL-CELL RECOGNITION AND LYMPHOCYTE HOMING IN MAN *EUROPEAN JOURNAL OF IMMUNOLOGY*  
JALKANEN, S. T., BARGATZE, R. F., Herron, L. R., BUTCHER, E. C.  
1986; 16 (10): 1195-1202
- A DISTINCT ENDOTHELIAL-CELL RECOGNITION SYSTEM THAT CONTROLS LYMPHOCYTE TRAFFIC INTO INFLAMED SYNOVIUM *SCIENCE*  
JALKANEN, S., STEERE, A. C., FOX, R. I., BUTCHER, E. C.  
1986; 233 (4763): 556-558

- **ANTIGEN-INDUCED CHANGES IN B-CELL SUBSETS IN LYMPH-NODES - ANALYSIS BY DUAL FLUORESCENCE FLOW CYTOFLUOROMETRY** *EUROPEAN JOURNAL OF IMMUNOLOGY*  
Kraal, G., Hardy, R. R., Gallatin, W. M., Weissman, I. L., BUTCHER, E. C.  
1986; 16 (7): 829-834
- **DUAL IMMUNOFLUORESCENCE STUDIES OF CORTISONE-INDUCED THYMIC INVOLUTION - EVIDENCE FOR A MAJOR CORTICAL COMPONENT TO CORTISONE-RESISTANT THYMOCYTES** *JOURNAL OF IMMUNOLOGY*  
REICHERT, R. A., Weissman, I. L., BUTCHER, E. C.  
1986; 136 (10): 3529-3534
- **PHENOTYPIC ANALYSIS OF THYMOCYTES THAT EXPRESS HOMING RECEPTORS FOR PERIPHERAL LYMPH-NODES** *JOURNAL OF IMMUNOLOGY*  
REICHERT, R. A., Weissman, I. L., BUTCHER, E. C.  
1986; 136 (10): 3521-3528
- **ONTOGENY OF LYMPHOCYTE HOMING RECEPTOR EXPRESSION IN THE MOUSE THYMUS** *JOURNAL OF IMMUNOLOGY*  
REICHERT, R. A., Jerabek, L., Gallatin, W. M., BUTCHER, E. C., Weissman, I. L.  
1986; 136 (10): 3535-3542
- **LYMPHOCYTE HOMING RECEPTORS** *CELL*  
Gallatin, M., STJOHN, T. P., Siegelman, M., Reichert, R., BUTCHER, E. C., Weissman, I. L.  
1986; 44 (5): 673-680
- **INTERACTIONS BETWEEN ENDOTHELIAL-CELLS AND LEUKOCYTES** *JOURNAL OF CELLULAR BIOCHEMISTRY*  
BUTCHER, E. C., Lewinsohn, D., Duijvestijn, A., BARGATZE, R., Wu, N., JALKANEN, S.  
1986; 30 (2): 121-131
- **THE REGULATION OF LYMPHOCYTE TRAFFIC** *CURRENT TOPICS IN MICROBIOLOGY AND IMMUNOLOGY*  
BUTCHER, E. C.  
1986; 128: 85-122
- **HOMING RECEPTORS AND THE CONTROL OF LYMPHOCYTE MIGRATION** *IMMUNOLOGICAL REVIEWS*  
JALKANEN, S., REICHERT, R. A., Gallatin, W. M., BARGATZE, R. F., Weissman, I. L., BUTCHER, E. C.  
1986; 91: 39-60
- **PROSPECTS FOR UNDERSTANDING THE ROLE OF LYMPHOID MICROENVIRONMENTS IN B-CELL DIFFERENTIATION**  
*INVIVO ADVANCES IN EXPERIMENTAL MEDICINE AND BIOLOGY*  
BUTCHER, E. C.  
1985; 186: 3-8
- **Lymphocyte and lymphoma receptors utilized in differentiation, in homing, and in lymphomagenesis.** *Haematology and blood transfusion*  
Weissman, I. L., McGrath, M. S., REICHERT, R. A., Gallatin, W. M., Ezine, S., Fink, P., BUTCHER, E. C., Marian, J., O'Neill, H. C.  
1985; 29: 449-454
- **GERMINAL CENTER CELLS - ANTIGEN-SPECIFICITY, HEAVY-CHAIN CLASS EXPRESSION AND EVIDENCE OF MEMORY** *ADVANCES IN EXPERIMENTAL MEDICINE AND BIOLOGY*  
Kraal, G., Weissman, I. L., BUTCHER, E. C.  
1985; 186: 145-151
- **HOMING RECEPTOR-BEARING THYMOCYTES, AN IMMUNOCOMPETENT CORTICAL SUBPOPULATION** *NATURE*  
Fink, P. J., Gallatin, W. M., REICHERT, R. A., BUTCHER, E. C., Weissman, I. L.  
1985; 313 (5999): 233-235
- **HUMAN T-CELL CLONES EXPRESS FUNCTIONAL HOMING RECEPTORS REQUIRED FOR NORMAL LYMPHOCYTE TRAFFICKING** *JOURNAL OF EXPERIMENTAL MEDICINE*  
NAVARRO, R. F., JALKANEN, S. T., HSU, M., SOENDERSTRUPHANSEN, G., GORONZY, J., WEYAND, C., FATHMAN, C. G., CLAYBERGER, C., KRENSKY, A. M., BUTCHER, E. C.  
1985; 162 (3): 1075-1080
- **INVITRO ANALYSIS OF THE HOMING PROPERTIES OF HUMAN-LYMPHOCYTES - DEVELOPMENTAL REGULATION OF FUNCTIONAL RECEPTORS FOR HIGH ENDOTHELIAL VENULES** *BLOOD*

- JALKANEN, S. T., BUTCHER, E. C.  
1985; 66 (3): 577-582
- **HUMAN LYMPHOCYTE-HIGH ENDOTHELIAL VENULE INTERACTION - FUNCTIONAL AND MOLECULAR CHARACTERIZATION ADVANCES IN EXPERIMENTAL MEDICINE AND BIOLOGY**  
JALKANEN, S., BARGATZE, R., HERRON, L., BUTCHER, E. C.  
1985; 186: 615-620
  - **ENRICHMENT OF MURINE AND HUMAN LANGERHANS CELLS WITH SOLID-PHASE IMMUNOABSORPTION USING PAN-LEUKOCYTE MONOCLONAL-ANTIBODIES JOURNAL OF INVESTIGATIVE DERMATOLOGY**  
Wood, G. S., Kosek, J., BUTCHER, E. C., Morhenn, V. B.  
1985; 84 (1): 37-40
  - **T-CELL CLONES - A MODEL OF A NON-RECIRCULATING PHASE OF T-CELL DIFFERENTIATION ADVANCES IN EXPERIMENTAL MEDICINE AND BIOLOGY**  
Dailey, M. O., Gallatin, W. M., Kraal, G., Butcher, E., Weissman, I.  
1985; 186: 621-627
  - **A HOMING RECEPTOR-BEARING CORTICAL THYMOCYTE SUBSET - IMPLICATIONS FOR THYMUS-CELL MIGRATION AND THE NATURE OF CORTISONE-RESISTANT THYMOCYTES CELL**  
REICHERT, R. A., Gallatin, W. M., BUTCHER, E. C., Weissman, I. L.  
1984; 38 (1): 89-99
  - **LOCALIZATION OF LYMPHOCYTE SUBPOPULATIONS IN PERIPHERAL LYMPHOID ORGANS - DIRECTED LYMPHOCYTE MIGRATION AND SEGREGATION INTO SPECIFIC MICROENVIRONMENTS AMERICAN JOURNAL OF ANATOMY**  
Rouse, R. V., REICHERT, R. A., Gallatin, W. M., Weissman, I. L., BUTCHER, E. C.  
1984; 170 (3): 391-405
  - **LANGERHANS CELLS REACT WITH PAN-LEUKOCYTE MONOCLONAL-ANTIBODY - ULTRASTRUCTURAL DOCUMENTATION USING A LIVE CELL-SUSPENSION IMMUNOPEROXIDASE TECHNIQUE JOURNAL OF INVESTIGATIVE DERMATOLOGY**  
Wood, G. S., Morhenn, V. B., BUTCHER, E. C., Kosek, J.  
1984; 82 (4): 322-325
  - **The role of carbohydrate in heterotypic cell-cell recognition: lymphocyte-high endothelial cell interaction as a model system. Biology of the cell**  
BUTCHER, E. C.  
1984; 51 (2): 248-250
  - **Cellular traffic cues in vivo. Immunology today**  
Butcher, E.  
1983; 4 (11): 309
  - **DIFFERENCES IN INVIVO DISTRIBUTION AND HOMING OF T-CELL SUBSETS TO MUCOSAL VS NONMUCOSAL LYMPHOID ORGANS JOURNAL OF IMMUNOLOGY**  
Kraal, G., Weissman, I. L., BUTCHER, E. C.  
1983; 130 (3): 1097-1102
  - **DUAL FLUORESCENCE STUDIES OF LYMPHOCYTE MIGRATION AND DIFFERENTIATION**  
BUTCHER, E. C., Weissman, I. L.  
MARCEL DEKKER INC. 1983: 105-
  - **A CELL-SURFACE MOLECULE INVOLVED IN ORGAN-SPECIFIC HOMING OF LYMPHOCYTES NATURE**  
Gallatin, W. M., Weissman, I. L., BUTCHER, E. C.  
1983; 304 (5921): 30-34
  - **GERMAL CENTER B-CELLS LACK HOMING RECEPTORS NECESSARY FOR NORMAL LYMPHOCYTE RECIRCULATION JOURNAL OF EXPERIMENTAL MEDICINE**  
REICHERT, R. A., Gallatin, W. M., Weissman, I. L., BUTCHER, E. C.  
1983; 157 (3): 813-827
  - **GENETIC-CONTROL OF T-CELL SUBSET REPRESENTATION IN INBRED MICE IMMUNOGENETICS**  
Kraal, G., Weissman, I. L., BUTCHER, E. C.

1983; 18 (6): 585-592

● **SURFACE PHENOTYPE AND MIGRATORY CAPABILITY OF PEYERS PATCH GERMINAL CENTER CELLS ADVANCES IN EXPERIMENTAL MEDICINE AND BIOLOGY**

BUTCHER, E. C., REICHERT, R. A., COFFMAN, R. L., NOTTENBURG, C., WEISSMAN, I. L.  
1982; 149: 765-772

● **SURFACE PHENOTYPE AND HOMING PROPERTIES OF ACTIVATED LYMPHOCYTES AND T-CELL CLONES**

DAILEY, M. O., GALLATIN, W. M., BUTCHER, E., WEISSMAN, I.  
ELSEVIER GMBH, URBAN & FISCHER VERLAG. 1982: 240-40

● **ANTIGEN-SPECIFICITY OF GERMINAL CENTER CELLS AND CHANGES IN ISOTYPE EXPRESSION**

KRAAL, G., WEISSMAN, I. L., BUTCHER, E. C.  
FEDERATION AMER SOC EXP BIOL. 1982: 418-18

● **GERMINAL CENTER B-CELLS ARE LYMPHOCYTES UNDERGOING A SESSILE PHASE OF DIFFERENTIATION**

REICHERT, R. A., GALLATIN, W. M., WEISSMAN, I. L., BUTCHER, E. C.  
ELSEVIER GMBH, URBAN & FISCHER VERLAG. 1982: 248-49

● **DIFFERENCES IN THE MIGRATION OF LYMPHOCYTE-B AND LYMPHOCYTE-T - ORGAN-SELECTIVE LOCALIZATION INVIVO AND THE ROLE OF LYMPHOCYTE-ENDOTHELIAL CELL RECOGNITION JOURNAL OF IMMUNOLOGY**

STEVENS, S. K., WEISSMAN, I. L., BUTCHER, E. C.  
1982; 128 (2): 844-851

● **ABNORMAL MIGRATION OF LYMPHOCYTE-T CLONES JOURNAL OF IMMUNOLOGY**

DAILEY, M. O., FATHMAN, C. G., BUTCHER, E. C., PILLEMER, E., WEISSMAN, I.  
1982; 128 (5): 2134-2136

● **SURFACE PHENOTYPE OF PEYERS PATCH GERMINAL CENTER CELLS - IMPLICATIONS FOR THE ROLE OF GERMINAL-CENTERS IN B-CELL DIFFERENTIATION JOURNAL OF IMMUNOLOGY**

BUTCHER, E. C., ROUSE, R. V., COFFMAN, R. L., NOTTENBURG, C. N., HARDY, R. R., WEISSMAN, I. L.  
1982; 129 (6): 2698-2707

● **SELECTIVE MIGRATION OF MURINE LYMPHOCYTES AND LYMPHOBLAST POPULATIONS AND THE ROLE OF ENDOTHELIAL-CELL RECOGNITION ADVANCES IN EXPERIMENTAL MEDICINE AND BIOLOGY**

BUTCHER, E. C., KRAL, G., STEVENS, S. K., WEISSMAN, I. L.  
1982; 149: 199-206

● **GERMINAL CENTER B-CELLS - ANTIGEN-SPECIFICITY AND CHANGES IN HEAVY-CHAIN CLASS EXPRESSION NATURE**

KRAL, G., WEISSMAN, I. L., BUTCHER, E. C.  
1982; 298 (5872): 377-379

● **NORMAL AND NEOPLASTIC LYMPHOCYTE MATURATION JOURNAL OF SUPRAMOLECULAR STRUCTURE AND CELLULAR BIOCHEMISTRY**

WEISSMAN, I. L., MCGRATH, M. S., PILLEMER, E., HOLLANDER, N., ROUSE, R. V., JERABEK, L., STEVENS, S. K., SCOLLAY, R. G., BUTCHER, E. C.  
1981; 15 (3): 303-314

● **Cellular, genetic, and evolutionary aspects of lymphocyte interactions with high-endothelia venules. Ciba Foundation symposium**

BUTCHER, E. C., WEISSMAN, I. L.  
1980; 71: 265-286

● **T-CELL MATURATION - THYMOCYTE AND THYMUS MIGRANT SUB-POPULATIONS DEFINED WITH MONOCLONAL-ANTIBODIES TO MHC REGION ANTIGENS JOURNAL OF IMMUNOLOGY**

SCOLLAY, R., JACOBS, S., JERABEK, L., BUTCHER, E., WEISSMAN, I.  
1980; 124 (6): 2845-2853

● **ORGAN SPECIFICITY OF LYMPHOCYTE MIGRATION - MEDIATION BY HIGHLY SELECTIVE LYMPHOCYTE INTERACTION WITH ORGAN-SPECIFIC DETERMINANTS ON HIGH ENDOTHELIAL VENULES EUROPEAN JOURNAL OF IMMUNOLOGY**

BUTCHER, E. C., SCOLLAY, R. G., WEISSMAN, I. L.  
1980; 10 (7): 556-561

● **DIRECT FLUORESCENT LABELING OF CELLS WITH FLUORESCEIN OR RHODAMINE ISOTHIOCYANATE .1. TECHNICAL ASPECTS JOURNAL OF IMMUNOLOGICAL METHODS**

- BUTCHER, E. C., Weissman, I. L.  
1980; 37 (2): 97-108
- **THYMUS-CELL MIGRATION QUANTITATIVE ASPECTS OF CELLULAR TRAFFIC FROM THE THYMUS TO THE PERIPHERY IN MICE** *EUROPEAN JOURNAL OF IMMUNOLOGY*  
SCOLLAY, R. G., BUTCHER, E. C., Weissman, I. L.  
1980; 10 (3): 210-218
- **DIRECT FLUORESCENT LABELING OF CELLS WITH FLUORESCIN OR RHODAMINE ISOTHIOCYANATE .2. POTENTIAL APPLICATION TO STUDIES OF LYMPHOCYTE MIGRATION AND MATURATION** *JOURNAL OF IMMUNOLOGICAL METHODS*  
BUTCHER, E. C., SCOLLAY, R. G., Weissman, I. L.  
1980; 37 (2): 109-121
- **LYMPHOCYTE ADHERENCE TO HIGH ENDOTHELIAL VENULES - CHARACTERIZATION OF A MODIFIED INVITRO ASSAY, AND EXAMINATION OF THE BINDING OF SYNGENEIC AND ALLOGENEIC LYMPHOCYTE POPULATIONS** *JOURNAL OF IMMUNOLOGY*  
BUTCHER, E. C., SCOLLAY, R. G., Weissman, I. L.  
1979; 123 (5): 1996-2003
- **Lymphocyte-high endothelial venule interactions: examination of species specificity.** *Advances in experimental medicine and biology*  
Butcher, E., Scollay, R., Weissman, I.  
1979; 114: 65-72
- **EVIDENCE OF CONTINUOUS EVOLUTIONARY CHANGE IN STRUCTURES MEDIATING ADHERENCE OF LYMPHOCYTES TO SPECIALIZED VENULES** *NATURE*  
Butcher, E., Scollay, R., Weissman, I.  
1979; 280 (5722): 496-498
- **PATHOLOGY AND HOMING OF A TRANSPLANTABLE MURINE B CELL LEUKEMIA (BCL1)** *JOURNAL OF IMMUNOLOGY*  
Warnke, R. A., Slavin, S., Coffman, R. L., BUTCHER, E. C., Knapp, M. R., Strober, S., Weissman, I. L.  
1979; 123 (3): 1181-1188
- **LYMPHOID SYSTEM - ITS NORMAL ARCHITECTURE AND POTENTIAL FOR UNDERSTANDING SYSTEM THROUGH STUDY OF LYMPHOPROLIFERATIVE DISEASES** *HUMAN PATHOLOGY*  
Weissman, I. L., Warnke, R., BUTCHER, E. C., Rouse, R., Levy, R.  
1978; 9 (1): 25-45
- **LYT MARKERS ON THYMUS-CELL MIGRANTS** *NATURE*  
Scollay, R., Kochen, M., Butcher, E., Weissman, I.  
1978; 276 (5683): 79-80
- **LYMPHOCYTE INTERACTION WITH HIGH ENDOTHELIAL VENULES - LACK OF SPECIES SPECIFICITY**  
Butcher, E., Scollay, R., Weissman, I.  
GUSTAV FISCHER VERLAG.1978: 304-
- **MEASUREMENT OF NANOGRAM QUANTITIES OF PROTEIN BY HYDROLYSIS FOLLOWED BY REACTION WITH ORTHOPHTHALALDEHYDE OR DETERMINATION OF GLUTAMATE** *ANALYTICAL BIOCHEMISTRY*  
BUTCHER, E. C., Lowry, O. H.  
1976; 76 (2): 502-523