



**Chiron Technologies Center for Gene Therapy**  
RESEARCH SCIENTIST II

**San Diego, CA**  
1994 - 1998

Successfully directed and executed research characterizing immune responses associated with retroviral vector gene therapy. Contributed to multiple projects in a dynamic environment.

- Directed preclinical research characterizing *in vivo* correlates of activity for HIV immunotherapeutic treatment.
- Managed collaborative studies testing feasibility of gene therapy for inflammatory diseases, such as rheumatoid arthritis.
- Developed protocols for analysis and prevention of immune reactions associated with gene therapy.
- Supervised postdoctoral fellows, research associates, summer interns, and vivarium staff.
- Initiated, coordinated cross-team discussion group to address issues common to R&D groups within the company
- Nine manuscripts published; two patent applications submitted

**Howard Hughes Medical Institute**  
POST-DOCTORAL FELLOW

Laboratory of Drs. Philippa Marrack and John Kappler  
1987 - 1994

Research focusing on balance between T cell activation and peripheral tolerance

Further work on *in vivo* effects of superantigens; thymocyte development; thymic microenvironment

**Boston University School of Medicine**  
GRADUATE STUDENT

Laboratory of Dr. Gail E. Sonenshein  
1982 - 1987

Research focusing on regulation of expression of the *c-myc* proto-oncogene

**Management Training:**

2000-present Project Management certification program at UCSD Extension

1997-98 Microsoft Project

1997 *Trac 5000* management training

1994-1995 Zenger-Miller *Frontline Leadership* course

## **Publications and Patents:**

### **Patents Pending**

McCormack, J.E., J. Kappler, B. Kotzin and P. Marrack, "Method of Treatment of Disease by Deletion of T Cells" (WO9423734)

McCormack, J.E., S. Chada, and D. Jolly, "Compositions and Methods for Treating Arthritis Utilizing Gene Therapy" (WO9911292)

McCormack, J.E., D. Jolly, et al., "Use of Submicron Oil-In-Water Emulsions with DNA Vaccines"

### **Publications**

Del Vecchio, M.A., H.I. Georgescu, J.E. McCormack, P.D. Robbins and C.H. Evans, "Approaches to Enhancing the Retroviral Transduction of Human Synoviocytes", *Arthritis Res.* **3**:259-263 ('01).

McCormack, J.E., W. Edwards, J. Sensintaffer, L. Lillegren, M. Kozloski, D. Brumm, L. Karavodin, D.J. Jolly and J. Greengard, "Factors Affecting Long-Term Expression of a Secreted Transgene Product After Intravenous Administration of a Retroviral Vector", *Mol. Therapy* **3**:516-525 ('01).

Sheridan, P.L., M. Bodner, A. Lynn, T.K. Phuong, N.J. DePolo, D.J. de la Vega, J. O'Dea, K. Nguyen, J.E. McCormack, D.A. Driver, K. Townsend, C.E. Ibañez, N.C. Sajjadi, J.S. Greengard, M.D. Moore, J. Respass, S.M.W. Chang, T.W. Dubensky, D.J. Jolly and S.L. Sauter, "Generation of Retroviral Packaging and Producer Cell Lines for Large Scale Vector Production and Clinical Application: Improved Safety and High Titer", *Mol. Therapy* **2**:262-275 ('00).

Boyle, D.L., K.H.Y. Nguyen, S. Zhuang, Y. Shi, J.E. McCormack, S. Chada and G.S. Firestein, "Intra-articular IL-4 Gene Therapy in Arthritis: Anti-Inflammatory Effect and Enhanced Th2 Activity", *Gene Therapy* **6**:1911-1918 ('99).

Nguyen, K.H.Y., D.L. Boyle, J. McCormack, S. Chada and G.S. Firestein, "Direct Synovial Gene Transfer with Retroviral Vectors in Rat Adjuvant Arthritis", *J. Rheumatol.* **25**:1118-1125 ('98).

Hariharan, M.J., D.A. Driver, K. Townsend, D. Brumm, J.M. Polo, B.A. Belli, D.J. Catton, D. Hsu, D. Mittelstaedt, J. E. McCormack, L. Karavodin, T.W. Dubensky, S.M.W. Chang and T. A. Banks, "DNA Immunization against a Herpes Simplex Virus: Enhanced Efficiency Using a Sindbis Virus-Based Vector", *J. Virol.* **72**:950-958 ('98).

Ghiviazani, S.C., E.R. Lechman, C. Tio, K.M. Mulé, S. Chada, J.E. McCormack, C.H. Evans and P.D. Robbins, "Direct Retrovirus-Mediated Gene Transfer to the Synovium of the Rabbit Knee: Implications for Arthritis Gene Therapy", *Gene Therapy* **4**:977-982 ('97).

McCormack, J.E., D. Martineau, N. DePolo, S. Maifert, L. Akbarian, K. Townsend, W. Lee, M. Irwin, N. Sajjadi, D.J. Jolly and J. Warner, "Anti-Vector Immunoglobulin Induced by Retroviral Vectors", *Hum. Gene Ther.* **8**:1263-1273 ('97).

Martineau, D., W.M. Klump, J.E. McCormack, N.J. DePolo, E. Kamantigue, M. Petrowski, J. Hanlon, D.J. Jolly, S.J. Mento and N. Sajjadi, "Evaluation of PCR and ELISA Assays for Screening Clinical Trial Subjects for Replication-Competent Retrovirus", *Hum. Gene Ther.* **8**:1231-1241 ('97).

- Barbo, J.V., J.E. McCormack, J.W. Moorhead and R.L. Fairchild, "Reconstitution of TCR alpha-chain expression in deletion mutants restores dinitrophenyl-specific/class I MHC-restricted suppressor molecule production", *J. Immunol.* **154**:1551-1559 ('95).
- Vella, A.T., J.E. McCormack, P.S. Linsley, J.W. Kappler and P. Marrack, "Lipopolysaccharide Interferes with the Induction of Peripheral T Cell Death", *Immunity* **2**:261-270 ('95).
- McCormack, J.E., J. Kappler and P. Marrack, "Stimulation with Specific Antigen Can Block Superantigen-Mediated Deletion *in vivo*", *Proc. Natl. Acad. Sci. USA* **91**:2086-2090 ('94).
- Hugo, P., J.W. Kappler, J.E. McCormack and P.C. Marrack, "Fibroblasts can induce thymocyte positive selection *in vivo*", *Proc. Natl. Acad. Sci. USA* **90**:10335-10339 ('93).
- McCormack, J.E., J.E. Callahan, J. Kappler and P. Marrack, "Profound Deletion of Mature T Cells *in vivo* by Chronic Exposure to Exogenous Superantigen", *J. Immunol.* **150**:3785-3792 ('93).
- Spencer, J.S., J.E. McCormack, and R.T. Kubo, "Characterization of Defective I-A Surface Expression in a Mixed Isotype Expressing B Cell Lymphoma: Continued expression of E $\alpha^d$ A $\beta^d$  despite competition from A $\alpha^d$ A $\beta^d$  pairs.", *Int. Immunol.* **4**:905-915 ('92).
- McCormack, J.E., T. Wade, H. Morales, J. Kappler and P. Marrack, "Analysis of Class II MHC Structure in Thymic Nurse Cells", *Cell. Immunol.* **138**:413-422 ('91).
- Maheswaran, S., J.E. McCormack, and G.E. Sonenshein, "Changes in Phosphorylation of myc Oncogene and RB Antioncogene Protein Products During Growth Arrest of the Murine Lymphoma WEHI 231 Cell Line", *Oncogene* **6**:1965-1971 ('91).
- McCormack, J.E., J. Kappler, P. Marrack and J.Y. Westcott, "Production of Prostaglandin E<sub>2</sub> and Prostacyclin by Thymic Nurse Cells in Culture", *J. Immunol.* **146**:239-243 ('91).
- Marrack, P., J. McCormack and J. Kappler, "Presentation of antigen, foreign major histocompatibility complex proteins and self by thymus cortical epithelium", *Nature* **338**:503-505 ('89).
- Marrack, P., M. Blackman, H.-G. Burgert, J. McCormack, J. Cambier, T.H. Finkel and J. Kappler, "T-cell Repertoire and Thymus", *Cold Spring Harbor Symp. Quant. Biol.* **LIV**:105-110 ('89).
- Kindy, M.S., J.E. McCormack, A.J. Buckler, R.A. Levine and G.E. Sonenshein, "Independent Regulation of Transcription of the Two Strands of the c-myc Gene", *Mol. Cell. Biol.* **7**:2857-2862 ('87).
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- McCormack, J.E., V.H. Pepe, R.B. Kent, M. Dean, A. Marshak-Rothstein and G.E. Sonenshein, "Specific regulation of c-myc oncogene expression in a murine B cell lymphoma", *Proc. Natl. Acad. Sci. USA* **81**: 5546-5550 ('84).
- McCormack, J.E., R.B. Kent, V.H. Pepe, M. Dean, A. Marshak-Rothstein, and G.E. Sonenshein, "Immune regulation of the c-myc oncogene in a murine B lymphoma", *Curr. Top. Micro. Immunol.* **113**:127-132 ('84).
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