

## Curriculum Vitae

**Michael Minnicozzi, Ph.D.**

**Business:**

Asthma, Allergy and Inflammation Branch  
National Institutes of Health  
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**Areas of Experience:**

- Pharmaceutical Business
  - Project Management, Work Planning and Team Building
  - Business Process Ownership
  - Technical Transfer Program Facilitation including;  
Program Leadership, global network manufacturing strategy,  
regulatory compliance commitment programs, process validation  
and equipment qualification initiatives.
  - Early Development Team Reporting and Communications
  - Risk Assessment and Contingency Planning working as a cross-  
functional manager of global groups e.g., analytical, micro-, clinical  
research, change control and quality control.
- Pre-clinical Research
  - In vivo Pulmonary Function and Inflammatory Pulmonary Disease  
modeling
  - Leukocyte adherence, recruitment and activation including; measurement  
of cell degranulation and cell surface biomarkers
  - Mucin regulation and production
  - Principles of pharmacology
  - Proficient in use of computers and computer assisted instrumentation

**Present Position:** Program/Project Officer

Responsibilities: build, maintain and monitor research investigator portfolios; determine and validate feasibility of project schedules among consortium/contract members; identify, propose, write, present and monitor new research initiatives/workshops. Provide authoritative advice to Institute management in area of expertise. Respond to Congressional inquiries and other request for information.

**Previous Positions:** Project Manager 2004-2005  
S/P Global Technical Services  
Project Management  
Supervisor: Ms. Judy Cusick

Principal Scientist 2000-2004  
Department of Allergy  
Schering-Plough Research Institute  
Supervisor: Dr. R.W. Chapman

Associate Principal Scientist 1997-2000  
Department of Allergy  
Schering-Plough Research Institute

Senior Scientist 1994-1997  
Department of Allergy-SPRI

Associate Scientist 1980 -1994  
Immunoassay Development  
Schering-Plough Research

Senior Laboratory Technician 1978-1980  
Department of Biochemistry  
SUNY at Stonybrook, NY

**Education:**

Ph.D. 1994  
UMDNJ-Graduate School of Biomedical Sciences  
Department of Physiology  
Newark, NJ  
Dissertation: "Modulation of microvascular permeability during chronic eosinophil inflammation."  
Thesis Advisor: Dr. Walter N. Durán

M.S. 1987  
Rutgers, The State University of New Jersey  
Newark, NJ

B.S. 1978  
SUNY at Stonybrook  
Stonybrook, NY

**Past Affiliations:**

Adjunct Professor of Biology  
Union County College  
Cranford, NJ 07016

Adjunct Associate Professor of Pharmacology  
and Physiology  
UMDNJ - New Jersey Medical School  
Newark, NJ 07103

Northeast Research Consortium Peer Review Group  
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Research Peer Review Committee  
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Microcirculatory Society  
Business Development Committee  
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NJ Lupus Erythematosus Foundation  
Research Grant Coordinator  
Elmwood Park NJ

**Memberships:**

The American Physiological Society  
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American Association for the Advancement of Science  
1200 New York Ave, NW  
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New York Academy of Sciences  
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New York NY 10021

American Thoracic Society  
1740 Broadway, 15 Fl  
New York NY 10019-8700

**Publications:**

Khuang R, Shue HJ, Blythin DJ, Shi NY, Gu D, Chen X, Schwerdt J, Lin L, Ting PC, Zhu X, Aslanian R, Piwinski JJ, Xiao L, Prelusky D, Wu P, Zhang J, Zhang X, Celly CS, **Minnicozzi M**, Billah M, Wang P. 2007. Discovery of a highly potent series of oxazole-based phosphodiesterase 4 inhibitors. *Bioorg Med Chem Lett* 17(18):5150-5154.

Chapman RW, **Minnicozzi M**, Celly CS, Phillips JE, Kung TT, Hipkin RW, Fan X, Rindgen D, Deno G, Bond R, Gonsiorek W, Billah MM, Fine JS and Hey JA. 2007. A novel orally active CXCR1/2 receptor antagonist, Sch527123, inhibits neutrophil recruitment, mucus production and goblet cell hyperplasia in animal models of pulmonary inflammation. *J Pharm Ther* 322(2):486-493.

Chao J, Taveras AG, Cha J, Aki C, Dwyer M, Yu Y, Purakkattle B, Rindgen D, Jakway J, Hipkin W, Fosetta J, Fan X, Lundell D, Fine J, **Minnicozzi M**, Phillips J and Merritt JR. 2007. C(4)-alkyl substituted furanyl cyclobutenediones as potent

orally bioavailable CXCR2 and CXCR1 receptor antagonists. *Bioorgan Med Chem Lett* 17(13):3778-3793.

Sawyer RT, Gergen PJ, **Minnicozzi M**, Plaut M, Dong G, Schwaninger JM, Fenton MJ. 2006. The future of immunotherapy. Report of a National Institute of Allergy and Infectious Disease (NIAID), Division of Allergy, Immunology, and Transplantation (DAIT) workshop. *Allergy* 61:1159-1161.

Phillips JE, Case NR, Celly C, Chapman RW, Hey JA and **Minnicozzi M**. 2006. An enzyme linked immunosorbent assay for the determination of mucin levels in bronchoalveolar lavage fluid. *J Pharmacol Toxicol Methods* 53: 160-167.

Chorley BN, Crews AL, Li Y, Adler KB, **Minnicozzi M** and Martin L. 2006. Differential Muc2 and Muc5ac secretion by stimulated guinea pig tracheal epithelial cells in vitro. *Resp Res* 7:35-48.

Spond J, Billah MM, Chapman RW, Egan RW, Hey JA, House A, Kreutner K, and **Minnicozzi M**. 2004. The role of neutrophils in LPS-induced changes in pulmonary function in conscious rats. *Pulmon Pharm Ther* 17:133-140.

Spond J, Case N, Chapman RW, Crawley Y, Egan RW, Fine J, Hey JA, Kreutner W, Kung T, Wang P, and **Minnicozzi M**. 2003. Inhibition of experimental acute inflammation by pirfenidone. *Pulmon Pharm Ther* 16(4):207-214.

Billah MM, Cooper N, **Minnicozzi M**, Warneck J, Wang P, Hey J, Kreutner W, Rizzo CA, Smith SR, and Young S. 2002. Pharmacology of N-(3,5-dichloro-1-oxido-4-pyridinyl)-8-methoxy-2-(trifluoromethyl)-5-quinoline carboxamide (SCH 351591), a novel, orally active, phosphodiesterase 4 inhibitor. *J Pharm Exp Ther* 302(1):127-137.

Billah M, Buckley GM, Cooper N, Dyke HJ, Egan R, Ganguly A, Gowers L, Hannah DR, Haughan AF, Kendall HJ, Lowe C, **Minnicozzi M**, Montana JG, Oxford J, Peake JC, Picken CL, Piwinski JJ, Naylor R, Sabin V, Sharpe A, Shih NY, and Warneck JB. 2002. 8-methoxyquinolines as PDE4 inhibitors. *Bioorg Med Chem Lett* 12(12):117-1619.

Billah M, Cooper N, Cuss F, Davenport RJ, Dyke HJ, Egan R, Ganguly A, Gowers L, Hannah DR, Haughan AF, Kendall HJ, Lowe C, **Minnicozzi M**, Montana JG, Naylor R, Oxford J, Peake JC, Piwinski JJ, Runcie KA, Sabin V, Sharpe A, Shih NY, and Warneck JB. 2002. Synthesis and profile of SCH351591, a novel PDE4 inhibitor. *Bioorg Med Chem Lett* 12(12):1621-3.

Li Y, Martin LD, **Minnicozzi M**, Greenfeder S, Fine J, Pettersen CA, Chorley B, and Adler KB. 2001. Enhanced expression of mucin genes in a guinea pig model of allergic asthma. *Am J Resp Cell Mol Biol*. 25:644-651.

Kung TT, Luo B, Crawley Y, Garlisi CG, Devito K, **Minnicozzi M**, Egan RW, Kreutner W, and Chapman RW. 2001. Effect of anti-m-IL-9 antibody on the

development of pulmonary inflammation and airway hyperresponsiveness in allergic mice. *Am J Resp Cell Mol Biol* 25:600-605.

Spond J, Chapman R, Fine J, Jones H, Kreutner W, Kung TT, and **Minnicozzi M**. 2001. Comparison of PDE4 Inhibitors, Rolipram and SB 207499 (Airlfo), in a rat model of pulmonary neutrophilia. *Pulmon Pharm Ther* 14:157-164.

Chapman RW, Hey JA, McLeod R, **Minnicozzi M** and Rizzo C. 1999. Tachykinins in the Lung. *Drug News and Perspectives*. 11:480-489.

**Minnicozzi M**. 1999. The Inhibition of Interleukin 5 in Allergic Diseases. *Exp Opin Ther Pat* 9:147-156.

Egan RW, Athwal D, Bodmer MW, Carter JM, Chapman RW, Chou CC, Cox MA, Emtage JS, Fernandez X, Genatt N, Indelicato SR, Jenh CH, Kreutner W, Kung TT, Mauser PJ, **Minnicozzi M**, Murgolo NJ, Narula SK, Petro ME, Schilling A, Sehring S, Stelts D, Stephens S, Taremi SS, Weiner SH, Zavodiny PJ and Zurcher J. 1999. Effect of Sch 55700, a humanized monoclonal antibody to human interleukin-5, on eosinophilic response and bronchial hyperreactivity. *Arzneimittel Forschung Drug Res* 49:779-790.

Garlisi CG, Kung TT, Wang P, **Minnicozzi M**, Umland S, Chapman RW, Stelts D, Crawley Y, Falcone A, Myers JG, Jones H, Billah MM, Kreutner W, and Egan RW, 1999. Effects of chronic anti-interleukin-5 monoclonal antibody treatment in a murine model of pulmonary inflammation. *Am J Respir Cell Mol Biol* 20:248-255.

Minshall EM, Cameron L, Schleimer R, **Minnicozzi M**, Egan RW, Ramos JCG, Eidelman DH and Hamid Q. 1998. IL-5 mRNA and immunoreactivity in the bone marrow of sensitized Balb/c mice following allergen challenge: Evidence for T Cell involvement. *Am J Respir Crit Care Med* 158:951-957.

Chapman RW, Sehring SJ, Garlisi CG, Falcone A, Kung TT, Stelts D, **Minnicozzi M**, Jones H, Umland S, Egan RW and Kreutner W. 1998. Anti-inflammation activity of inhaled mometasone furoate in allergic mice. *Arzneimittel Forschung Drug Res* 48:384-391.

Stelts D, Egan RW, Falcone A, Garlisi CG, Gleich GJ, Kreutner W, Kung TT, Nahrebne DK, Chapman RW and **Minnicozzi M**. 1998. Eosinophils retain their granule major basic protein in a murine model of allergic pulmonary inflammation. *Am J Respir Cell Mol Biol* 18:463-470.

Garlisi C, Falcone A, Hey JA, Paster TM, Fernandez X, Rizzo CA, **Minnicozzi M**, Jones H, Billah MM, Egan RW and Umland SP. 1997. Airway eosinophils, T cells, Th2-type cytokine mRNA and hyperreactivity in response to aerosol challenge of allergic mice with previously established pulmonary inflammation. *Am J Respir Cell Mol Biol*. 17: 642-651.

Feder LS, Stelts D, Chapman RW, Manfra D, Crawley Y, Jones H, **Minnicozzi M**, Fernandez X, Paster T, Egan RW, Kreutner W and Kung TT. 1997. Role of nitric oxide on eosinophilic lung inflammation in allergic mice. *Am J Respir Cell Mol Biol* 17: 436-442.

**Minnicozzi M**, Ramirez M, Kobayashi I, Kim DK, Egan RW and Durán WN. 1995. Polyarginine and eosinophil derived major basic protein increase microvascular permeability independently of histamine or nitric oxide release. *Microvasc Res* 50: 56-70.

**Minnicozzi M**, Durán WN, Kim D, Gleich GJ, Wagner J and Egan RW. 1995. Tissue eosinophilia induced by recombinant human interleukin 5 in the hamster cheek pouch membrane. *Med Inflamm* 4: 331-338.

Ramirez M, Quardt S, Kim D, Oshiro H, **Minnicozzi M** and Durán WN. 1995. Platelet-activating factor modulates microvascular permeability through nitric oxide synthesis. *Microvasc Res* 50: 223-234

**Minnicozzi M**, Gleich GJ, Durán WN and Egan RW. 1994. Eosinophil granule proteins increase microvascular permeability. *J Immunol* 153:2664-2670.

**Minnicozzi M**, Anthes JC, Siegel MI, Billah MM and Egan RW. 1990. Activation of phospholipase D in normodense human eosinophils. *Biochem Biophys Res Commun* 170:540-547.

Gulbenkian AR, Fernandez X, Kreutner W, **Minnicozzi M**, Watnick AS, Kung TT and Egan RW. 1990. Anaphylactic challenge causes eosinophil accumulation in bronchoalveolar lavage fluid of guinea pigs. *Am Rev Respir Dis* 142:680-685.

Protzman WP, **Minnicozzi M**, Jacobs SL, Surprenant DI, Schwartz J and Oden EM. 1985. Immunoradiometric assay of recombinant human alpha-2 interferon. *J Clin Microbiol* 22:596-599.

Protzman WP, Jacobs SL, **Minnicozzi M**, Oden EM and Kelsey DK. 1984. A radioimmunologic technique to screen for antibodies to  $\alpha$ -2 interferon. *J Immunol Meth* 75:317-323.

## **Abstracts:**

Hipkin RW, **Minnicozzi M**, Fan X, Celly C, Rindgen D, Jakway J, Kung TT, Billah M, Egan R, Narula S, Hey JA, Lundell D, Fine JS, Chapman RW. 2006. SCH527123 is a selective and potent CXCR1/2 antagonist which inhibits neutrophil recruitment and mucus production in experimental models of obstructive pulmonary Inflammation. *Proceedings of ATS*. 3:A582.

**Minnicozzi M**, Celly C, Chapman R, Hey JA, House A, Spond J, and Kreutner W. Changes in Breathing Frequency During Pulmonary Inflammation in Rats. 2003. *World Congress Inflamm* 2.28.

Phillips JE, Hseuh D, Zhang X, Spond J, Sehring S, Celly CS, Hey JA, Kreutner W, **Minnicozzi M**. 2003. Effect of Airway Irritants on Mucin Concentration in Rat Bronchoalveolar Lavage Fluid Measured by ELISA. *Am Rev Respir Dis Crit Care Med*

Ohara N, **Minnicozzi M**, Pappas PJ, Hobson RW, and Durán WN. 2003. Interleukin-8 directly increases microvascular permeability *in vivo*. *FASEB J*.

Spond J, Chapman R, Crawley Y, Fine J, Hey JA, Kung T, Kreutner W, and **Minnicozzi M**. 2002. Use of Pirfenidone in Models of Acute Pulmonary Inflammation. *FASEB J*. D136.

Spond J, Chapman R, Fine J, Kreutner W, Jones H, and **Minnicozzi M**. 2000. Inhibitory Activity of Rolipram and SB 207499 in a rat Model of LPS-Induced Pulmonary Inflammation. *Inflamm Res* 49: S88.

**Minnicozzi M**, Fine J, Kreutner W, Jones J, Spond J, Chapman RW. 2000. Inhibition of LPS-induced pulmonary inflammation by betamethasone and SB 207499 in rats. *Am J Crit Care Med* 161:A183.

Kung TT, Chapman RW, Kreutner W, Egan RW, Lou B, **Minnicozzi M**, Crawley Y and Jones H. 2000. Effect of anti-mIL-9 antibody on the development of pulmonary eosinophilia and airway hyperresponsiveness in allergic mice. *Am J Crit Care Med* 161:A844.

Li Y, Greenfeder S, Martin LD, **Minnicozzi M**, Voynow JA and Adler K. 1999. Cloning and expression of the guinea pig MUC2 and MUC5AC genes. *Am J Respir Crit Care Med* 159:A852.

Li Y, Martin LD, **Minnicozzi M** and Adler K. 1998. Cloning of the guinea pig MUC2cDNA and MUC2 gene expression in guinea pig airway epithelium *in vitro*. *Am J Respir Crit Care Med* 157:A728.

**Minnicozzi M**, Nahrebne DK, Egan RW, Kreutner W, Kung TT, Stelts D and Chapman RW. 1997. Lack of eosinophil release of MBP in a murine model of allergic pulmonary inflammation. *Am J Respir Crit Care Med* 199:A627.

Minshall E, Schleimer R, Cameron C, **Minnicozzi M**, Egan RW, Eidelman DH and Hamid Q. 1997. IL-5 and  $\alpha$ IL-5R mRNA expression in the bone marrow of sensitized Balb/c mice following allergen challenge. *Am J Respir Crit Care Med* 155:A735.

Kung TT, Stelts D, Jones H, **Minnicozzi M**, Egan RW, Kreutner W and Chapman RW. 1996. A humanized monoclonal antibody to human IL-5 (Sch 55700) reduces eosinophilic pulmonary inflammation in allergic mice. *Am J Respir Crit Care Med* 153: A220.

Kung, TT, Chapman RW, Egan RW, Jones H, **Minnicozzi M**, Stelts D, and Kreutner W. 1996. Nitric oxide synthase inhibitors reduce pulmonary eosinophilia in allergic mice. *Am. J. Respir. Crit. Care Med.* 153: A797.

Garlisi CG, Falcone A, Hey JA, Paster T, Fernandez X, Rizzo C, **Minnicozzi M**, Jones H, Billah MM, Egan RW and Umland SP. 1996. Characterization of the response induced by aerosol challenge in the lungs of allergic mice with on-going pulmonary inflammation. *Am J Respir Crit Care Med* 153: A140.

Ramirez MM, **Minnicozzi M**, Gleich GJ, Egan RW and Durán WN. 1995. Eosinophil derived major base protein increases microvascular permeability independently of nitric oxide. *FASEB J.* 9:104.

**Minnicozzi M**, Gleich GJ, Durán WN and Egan RW. 1995. Increased microvascular permeability induced by eosinophil proteins. *Int Arch Aller Immunol* 107: 348.

**Minnicozzi M**, Kobayashi I, Kim D, Egan RW and Durán WN. 1993. Polyamino acids peptides (PAP) increase microvascular transport in vivo. *FASEB J.* 7: M119.

### **Invited Presentations:**

Asthma Advisory Panel Meeting, Kenilworth, NJ, July 1998.  
"Interleukin 5 (IL-5) inhibition: A therapy for allergic diseases".

New Drugs for Asthma, National Heart and Lung Institute, London, UK, June 16-17, 1998. "Interleukin 5 inhibition".

New Jersey Thoracic Society and Pulmonary Research Group, New Brunswick, NJ, June 20-21, 1996. "Effect of inhaled mometasone furoate on inflammatory cell influx and cytokine levels in the lungs of allergic mice".

American Academy of Allergy, Asthma and Immunology, New Orleans, LA. Mar.15-20, 1996. "Effect of inhaled mometasone furoate on inflammatory cell influx and cytokine levels in the lung of allergic mice".

Lung Cell Biology Symposium, Woods Hole, MA, Nov. 5-8, 1995. "Recombinant human interleukin 5 induced tissue eosinophilia".

### **Book Chapters:**

Cuss FM, Chapman RW, Umland SP, **Minnicozzi M**, and Egan RW. 1999. Role of Interleukin 5 in Eosinophil Based Diseases. *In* : Immunotherapy in Asthma. Eds. J. Bousquet and H. Yssel, Marcel Dekker Inc. Basel. pp:457-467.