CURRICULUM VITAE

Name: **Thomas McKinsey, Ph.D.**

EDUCATION

1996	Doctor of Philosophy – Physiology Department of Physiology ***Primary Advisors**:* Jeffrey L. Osborn, Ph.D., Allen W. Cowley, Ph.D., Richard J. Roman, Ph.D., Julian H. Lombard, Ph.D., R. Clinton Webb, Ph.D. Medical College of Wisconsin, Milwaukee, WI
1989	Master of Science - Exercise Physiology Department of Human Kinetics University of WI-Milwaukee, Milwaukee, WI ***Major Advisor:*** Mark S. Sothmann, Ph.D.
1985	Bachelor of Science Department of Biological Sciences University of WI-Milwaukee, Milwaukee, WI

PROFESSIONAL EXPERIENCE

Academic Research Experience

2000-2001	Senior Staff Investigator (Faculty), Hypertension and Vascular Research Division, Department of Medicine, Henry Ford Hospital, Detroit, MI
1997-2000	Post-Doctoral Research Fellow, Hypertension and Vascular Research Division, Department of Medicine, Henry Ford Hospital, Detroit, MI
1996-97	Post-Doctoral Research Fellow, Department of Physiology, Medical College of Wisconsin, Milwaukee, WI
1991-1996	Graduate Student, Department of Physiology, Medical College of Wisconsin, Milwaukee, WI
1990	Research Associate, Department of Human Kinetics, University of WI-Milwaukee, Milwaukee, WI
1989-1991	Research Associate, Cardiovascular Pharmacology, Mt. Sinai Medical Center, Milwaukee, WI
1987-1989	Research Technician, Cardiopulmonary Rehabilitation Center, Zablocki VA

Medical Center, Wood, WI

Industry Research Experience

February '08 - Present **Associate Director**
In Vivo Pharmacology Laboratory
Research & Development
Gilead Colorado
Westminster, CO

Highlighted Responsibilities and Activities - all below, and expanded to:

- Group increased to 16 in-line reports in 2009 (4 Ph.D.s, 9 Research Associates, 3 Animal Care Technicians).
- Led programming and facility planning for expanded and relocation In Vivo Pharmacology facility (Planned move to Boulder facility for 4Q/2009: ~6600 sq ft)
- Served as *In Vivo* Pharmacology representative/advisor to 2 CKD and IPF Discovery Project Teams
- Organized, planned, and lead Key Opinion Leader Symposium to drive decision towards indication for internal CKD drug discovery efforts
- Developed and validated models of pulmonary and renal fibrosis, and proteinuric renal disease

January '07 **Senior Research Scientist I (re-leveled as part of Gilead Integration)**
Group Leader - *In Vivo* Pharmacology Laboratory
Research & Development
Gilead Colorado
Westminster, CO

Highlighted Responsibilities and Activities - all below, and expanded to:

- Group increased to 13 in-line reports in 2007 (staffed 3 additional B.S./M.S. biologists, 2 additional Ph.D. Scientist, 2 contract workers).
- Co-authored necessary documents for successful filing of Gilead-Novartis collaboration milestone payments.
- Led programming and facility planning for expanded In Vivo Pharmacology facility (Phase I 3Q/08: ~3950 sq ft; Phase II planned for 2010: ~4500 sq ft)
- Developed and validated models of systolic and diastolic heart failure, pulmonary and hepatic/portal hypertension and fibrotic disease
- Served as In Vivo Pharmacology representative to Fibrosis project teams
- Served as Preclinical expert on Endothelin Receptor Antagonist (ERA) Comparative Biology team
- Organized and planned Medical Affairs Advisory Committee Key Opinion Leader Symposium on ERA-mediated edema
- Authored multiple SOPs (e.g. Volatile Anesthetic Use; Animal Care and Vivarium Maintenance) to facilitate integration and adoption of Gilead Corporate EH&S mandates.
- Served on due-diligence review team for multiple pulmonary hypertension and renal disease in-licensing opportunities
- Participated in site visits and evaluations of CROs for out sourced research activities.

- Designed, developed, and validated technical advances for direct evaluation of systemic hemodynamics and humoral biomarkers.
- Designed, developed, and validated a novel device for consistent and reproducible induction of pressure overload (provisional patent issued).
- Designed, developed, and validated vascular access port methodology for serial evaluation of systemic hemodynamics and humoral biomarkers

May '04 – January '06 **Scientist III**
Group Leader - *In Vivo* Pharmacology Laboratory
Research & Development
Myogen, Inc. – Gilead Colorado (*per November 2006*)
Westminster, CO

Responsibilities and Activities:

- Planned and executed *in vivo* biochemical screening (pharmacokinetic, pharmacodynamic), proof-of-concept, and efficacy studies
- Developed, evaluated, and validated rodent models (surgical, pharmacological, genetic) of cardiac failure and pathological hypertrophy.
- Expanded (from 1000 → 1550 sq ft) *In Vivo* Pharmacology laboratory to concurrently house ≤ 1000 rats and ≤ 600 mice
- Reconfigured *In Vivo* Pharmacology laboratory to simultaneously utilize 6 Millar direct Pressure-Volume catheter systems; and 4 Bio-Pac modules (systemic hemodynamic & ECG determinations)
- Supervised transgenic mouse and neonatal rat breeding facilities.
- Performed due diligence on, and directed purchase of specialized rodent cardiac ultrasound technology (Vevo 770 by VisualSonics; n = 2), 32-channel rodent telemetry (DSI/Ponemah), and quantitative histology (AxioImager by Zeiss; n = 2) systems.
- Established and validated methodologies for obtaining serial, non-invasive measurements of cardiac morphology, ventricular systolic and diastolic performance
- Conducted necessary pre-clinical pharmacokinetic evaluation (Enoximone) and developed detailed study plan for preclinical mechanism of action and new indication studies (Darusentan) for Clinical Development Project Team
- Mentored and supervised three direct reports (B.S. level Research Associates) during 2004. Group increased to five reports in 2005 (4 B.S./M.S. Research Associates, 1 B.S. – animal care technician). Group increased to six reports in 2006 (added 1 Ph.D. – Scientist, 1 open Ph.D. position remaining).
- Served as *In Vivo* Pharmacology representative/advisor to 4 Heart Failure Discovery Project Teams
- Authored 6 SRPs (Standard Research Protocols) to optimize alignment of technical staff and training of incoming hires
- IACUC Chairman
- Animal facilities manager
- DEA Controlled Substance Liaison

2003 – 2004 **Associate Research Investigator**,
Cardio-Renal Pharmacology,
Global Pharmaceutical Research & Development,
Abbott Laboratories, Abbott Park, IL

Responsibilities & Activities:

- Planned and executed safety and efficacy pharmacology studies using both *in vivo* and *in vitro* models.
- Departmental radiation use permit holder.
- Served as departmental liaison for Global Anti-Anxiety project team as well as serving on review teams for Renal, Cardiovascular, and Hematologic In-Licensing opportunities.
- Mentored and supervised three direct reports (2 M.S., 1 B.S. level) during 2003 and 2004.

2001- 2002 **Senior Research Pharmacologist**,
Cardio-Renal Pharmacology
Global Pharmaceutical Research & Development
Abbott Laboratories, Abbott Park, IL

Responsibilities & Activities:

- Planned, executed, and supervised safety pharmacology studies using conscious and anesthetized *in vivo* (dogs, and non-human primates) cardiovascular models as well as *in vitro* hematologic models.
- Planned, executed, and supervised efficacy pharmacology studies using conscious and anesthetized *in vivo* diabetes and renal function models.
- Configured, validated, and supervised studies using non-human primate telemetry-colony.
- Departmental radiation use permit holder.
- Mentored and supervised one direct report from September 2001 to January 2003.

Teaching Experience

2004-2005 Biology Learning Skills Workshop and Biological Sciences Tutor
Front Range Community College, Westminster, CO

1995-1997 Laboratory Instructor/Teaching Assistant, Mini-Medical School, Medical College of Wisconsin, Milwaukee, WI

1992-1997 Head of Medical Student Tutoring Service, Freshman Medical Physiology, Medical College of Wisconsin, Milwaukee, WI

1992-1997 Teaching Assistant, Freshman Medical Physiology, Medical College of Wisconsin, Milwaukee, WI

1992-1995 Instructor - Physiology and Pathophysiology, LaFarge Lifelong Learning Institute, Milwaukee, WI

1988-1989 Teaching Assistant, Exercise Physiology, Department of Human Kinetics, University of WI-Milwaukee, Milwaukee, WI

Clinical Experience

1988 Cardiovascular Technologist, Department of Cardiology, Milwaukee

Regional Medical Center, Milwaukee, WI

IV. INVITED LECTURES

Experimental Biology - Corporate Symposium sponsored by VisualSonics: guest lecturer
Cardiac Physiological and Pathophysiological Determinations Using Ultra High-Frequency Ultrasound – Confessions of a Non-Cardiologist, April, 2007.

Medical College of Georgia: Visiting Professor; Department of Pharmacology
Modern Drug Discovery & Development: Differences Between Large and Small Pharma, March, 2006.

Nitromed: Invited Speaker
Renal Vascular and Tubular Mechanisms in Chronic Renal Neuroadrenergic Hypertension. June, 2003.

American Heart Association: Council for High Blood Pressure Research
PI-3-Kinase-Dependent Activation of eNOS Mediates Alpha-2 Receptor Induced Inhibition of Thick Ascending Limb Transport. September, 2001.

FASEB Summer Research Conference: Renal Hemodynamics
How Does Macula Densa NO Inhibit TGF? June, 2001

Michigan Hypertension Workshop – Gull Lake
Endogenous eNOS-mediated NO Production Inhibits Thick Ascending Limb Transport, May 1999.
Neurohumoral Regulation of Thick Ascending Limb Transport Via Activation of Nitric Oxide Synthase. May, 2000.

Experimental Biology Meeting
Chronic Renal Neuroadrenergic Hypertension Is Associated with Volume Contraction and Increased Renal Vascular Sensitivity to Norepinephrine. April, 1995.

Renal Neuroadrenergic Hypertension Upregulates α_2 Adrenoceptors and Downregulates AT_1 Receptors. April, 1997.

Division of Hypertension and Vascular Research, Henry Ford Hospital.
Renal Nitric Oxide: A Role in the Antihypertensive Effects of Aerobic Exercise? June, 1998.

Department of Physiology, Medical College of Wisconsin.
Mechanisms of Elevated Renal Vascular Resistance and Reactivity in Renal Neuroadrenergic Hypertensive Dogs, January, 1997
Chronic Renal Neuroadrenergic Hypertension Produces Volume Contraction and Increased Renal Vascular Reactivity *In Vivo* and *In Vitro*. June, 1995.
Changes in Renal Vascular Reactivity Are Involved in Renal Neurogenic Hypertension. August, 1994.
Studies on the Mechanisms of Renal Neuroadrenergic Hypertension. July, 1993.
Factors Influencing the Regulation of Renal Adrenoceptors. June, 1992.

V. ORGANIZATIONS

2008 - 2010: American Physiological Society – *Chariman, Liaison with Industry Committee (LWIC)*

2005 – Present: American Physiological Society – *Renal Section Steering Committee*

2004 – Present: American Physiological Society – *Liaison with Industry Committee (LWIC) representative for Renal Section*; *Careers Committee* (LWIC Representative)

2001-2004; 2007-present: International Society of Nephrology

1998-Present: American Society of Nephrology

1998-Present: American Heart Association: Council for High Blood Pressure Research

1997-Present: American Physiological Society Regular Membership

1995-Present: American Association for the Advancement of Science

1995-1997: American Physiological Society Student Membership.

1991-1995: Student Medical Association for Animal Research and Teaching (SMAART).

1986-1989: American College of Sports Medicine Student Membership.

VI. AWARDS and HONORS

Co-Chair, APS Translational Physiology Symposium "Novel Approaches in the Treatment of Heart Failure" – *Topic Accepted,* Anaheim, CA; Experimental Biology, 2010.

Chairman, APS Liaison with Industry Symposium "Molecular Imaging of Physiological Processes in Drug Discovery" – New Orleans, LA; Experimental Biology, 2009.

Co-Chair, APS Translational Physiology Symposium "Fibrosis – Physiology, Signaling and Potential Therapeutics" – New Orleans, LA; Experimental Biology, 2009.

Key Contributor Award, Gilead Sciences, Inc. – May 2009

Key Contributor Award, Gilead Sciences, Inc. – May 2008

Key Contributor Award, Gilead Sciences, Inc. – May 2007

Research Recognition Award, Global Pharmaceutical Research & Development - Abbott Laboratories, 2003

Research Grant, National Kidney Foundation – Michigan Affiliate, July 1, 2001. [not accepted].

Co-Chairman, FASEB Summer Research Conference: Renal Hemodynamics, Saxson's River VT, June, 2001.

Postdoctoral Fellowship Grant, National Kidney Foundation - Michigan Affiliate, July 1, 1999. [not accepted].

Postdoctoral Fellowship Grant (2 Year Award), American Heart Association - Michigan Affiliate, July 1, 1999.

American Physiological Society Award for Excellence in Renal Research (Post-Doctoral Fellow Competition), Experimental Biology Meeting, April, 1999.

Merck New Investigator Award, American Heart Association Council for High Blood Pressure Research Meeting, September, 1998.

Postdoctoral Fellowship Grant, National Kidney Foundation - Michigan Affiliate, July 1, 1998. [not accepted].
Postdoctoral Fellowship Grant, American Heart Association - Michigan Affiliate, July 1, 1998.

Midwest Physiological Society Renal Physiology/Hypertension Award, Midwest Physiological Society Meeting, June, 1996.

Proctor & Gamble Professional Opportunity Award - Water and Electrolyte Homeostasis Section, Experimental Biology Meeting, April, 1996.

Standing Ovation Award, **Nominated by medical students for outstanding teaching and service**, Medical College of Wisconsin, May, 1995.

American Physiological Society Award for Excellence in Renal Research (Graduate Student Competition), Experimental Biology Meeting, April, 1995.

Caroline tum Suden/Francis A. Hellebrandt Professional Opportunity Award, Committee on Women in Physiology of the American Physiological Society, Spring, 1995.

Chairman, 1st Annual Student's Choice Seminar, Medical College of Wisconsin, September, 1994.
Speaker: Arthur C. Guyton, M.D

Standing Ovation Award, **Nominated by medical students for outstanding teaching and service**, Medical College of Wisconsin, May, 1994.

Predoctoral Fellowship Grant, American Heart Association - Wisconsin Affiliate, July 1, 1994.

Predoctoral Fellowship Grant, American Heart Association - Wisconsin Affiliate, July 1, 1993.

VII. EDITORIAL CONTRIBUTIONS

1. American Journal of Physiology: ***Renal Physiology*** Section, ***Heart and Circulatory Physiology*** Section, and ***Regulatory, Integrative, and Comparative Physiology*** Section.

2. Journal of the American Society of Nephrology

3. Kidney International

4. Journal of Applied Physiology

VIII. PATENT APPLICATIONS

A. Provisional Patents

1. Methods for Preventing and/or Treating Renal Fibrosis, Filed US Patent Office - 27, February 2006

2. Methods for Preventing and/or Treating Renal Hypertrophy, Filed US Patent Office - 27, February 2006

3. A Device for Producing Uniform Reductions in Blood Vessel Diameter – 9, March 2007

B. Published Patents

1. Therapeutic Combinations and Methods for Cardiovascular Improvement and Treating Cardiovascular Disease, 8493-000016/US/PS1, Issued February 2008

IX. PUBLISHED WEBSITES

1. Principle Author: "What Industry Physiologists Do" (IndustryPhys.ppt) American Physiological Society "Liaison with Industry Committee Website; Fall 2006 (www.the-aps.org/committees/liaison)

2. Contributing Author: "Careers in Industry: The Drug Discovery Process" (DrugDiscovery.ppt) American Physiological Society "Liaison with Industry Committee Website, Spring 2006 (www.the-aps.org/committees/liaison)

IX. BIBLIOGRAPHY

A. Published Manuscripts

1. **Plato, C.F.,** and J.L. Osborn. Chronic renal neuroadrenergic hypertension is associated with increased renal norepinephrine sensitivity and volume contraction. *Hypertension* 28: 1034-

1040, 1996.

2. Osborn, J.L., **C.F. Plato**, E. Gordin, and X.R. He. Long-term increases in renal sympathetic nerve activity and hypertension. *Clin. Exp. Physiol. Pharmacol.* 24: 635-641, 1997.

3. **Plato, C.F.**, B.A. Stoos, D. Wang, and J.L. Garvin. Endogenous nitric oxide inhibits chloride transport in the thick ascending limb. *Am. J. Physiol.* 276: F159-F163, 1999.

4. **Plato, C.F.**, and J.L. Garvin. Nitric oxide, endothelin and nephron transport: potential interactions. *Clin. Exp. Pharmacol. Physiol.* 26: 262-268, 1999.

5. Garcia, N.H., **C.F. Plato**, and J.L. Garvin. Fluorescent determination of chloride in nanoliter samples. *Kidney Int.* 55: 321-325, 1999.

6. García, N.H., **C.F. Plato**, B.A. Stoos, and J.L. Garvin. Nitric oxide-induced inhibition of transport by thick ascending limbs from Dahl salt-sensitive rats. *Hypertension* 34: 508-513, 1999.

7. **Plato, C.F.**, E.G. Shesely, and J.L. Garvin. eNOS mediates L-arginine-induced inhibition of thick ascending limb chloride flux. *Hypertension* 35: 319-323, 2000.

8. **Plato, C.F.**, D.M. Pollock, and J.L. Garvin. Endothelin inhibits thick ascending limb chloride flux via ET_B receptor-mediated NO release. *Am. J. Physiol. Renal Physiol*. 279: F326-F333, 2000.

9. **Plato, C.F.** α-2 and β-adrenergic receptors mediate NE's biphasic effects on rat thick ascending limb chloride flux. *Am. J. Physiol. Regulatory Integrative Comp. Physiol.* 281: R979-R986, 2001.

10. **Plato, C.F.**, and J.L. Garvin. α_2-adrenergic-mediated tubular NO production inhibits thick ascending limb chloride absorption. *Am. J. Physiol. Renal Physiol*. 281:F679-F686, 2001.

11. Ortiz, P., B.A. Stoos, N.J. Hong, D.M. Boesch, **C.F. Plato**, and J.L. Garvin. High-salt diet increases sensitivity to NO and eNOS expression but not NO production in THALs. *Hypertension* 41(pt. 2): 682-687, 2003

12. Ortiz, P.A., N.J. Hong, **C.F. Plato**, M. Varela, and J.L. Garvin. An *in vivo* method for adenovirus-mediated transduction of thick ascending limbs. *Kidney Int*. 63:1141-1149, 2003.

13. Harrison, B.C., Kim, M-S., van Rooij, E., **Plato, C.F**., Papst, P.J., Vega, R.B., McAnally, J.A., Richardson, J., Bassel-Duby, R., Olson, E.N., and McKinsey, T. Regulation of cardiac stress signaling by PKD1. *Molec Cell Biol.* 26: 3875-3888, 2006.

14. Rybkin, I.I. Kim, M.S., Bezprozvannaya, S. Qi, X., Richardson, J.A., **Plato, C.F.,** Hill, J.A., Bassel-Duby, R., and Olson, E. Regulation of atrial natriuretic peptide by a novel Ras-like protein. *Proc Nat Acad Sci 2007*

15. Xin, M., Small, E.M., Sutherland, L.B., Qi, X., McAnally, J., **Plato, C.F.**, Richardson, J.A., Bassel-Duby, R., and Olson, E.N. MicorRNA-143 and -145 modulate cytoskeletal dynamics and responsiveness of smooth muscle cells to injury. *Genes and Development*, In Press, 2009

B. Manuscripts In Preparation/Submitted for Publication

1. **Plato, C.F.**, and J.L. Osborn. Altered kidney vascular reactivity in chronic renal neuroadrenegic hypertension. *Clin. Exp. Pharmacol. Physiol. Submitted.*

2. **Plato, C.F.**, G. Bachowski, X.-R. He, and J.L. Osborn. Renal neuroadrenergic hypertension upregulates α_2 adrenoceptors and downregulates AT_1 receptors. *Am. J. Physiol. Regulatory Integrative Comparative Physiol. Submitted.*

3. **Plato, C.F.**, and J.L. Osborn. Chronic renal neuroadrenergic hypertension alters renal vascular reactivity *in vitro*. *Am. J. Physiol. Regulatory Integrative Comparative Physiol*.

4. **Plato, C.F.**, B.F. Cox, and G.A. Reinhart. Disparate renal hemodynamic responses to dopamine D_3-Receptor activation in STZ-diabetic and normal rats. *J Cardiovasc Pharm*

5. **Plato, C.F.,** Perry, A.M., Lemon, D., Glascock, C.B., Peng, Y., Bush, E.W., and Hartman, J.C. Time-course of downregulation of cardiac alpha-myosin heavy chain and dose-dependent effects of exogenous thyroid hormone on cardiac performance in hypothyroid rats. *J Cardiovasc Pharm*

6. **Plato, C.F.**, Joly, K.M., Glascock, C., and Pitts, K.R. HDAC inhibition augments thyroid hormone induced increases in cardiac performance in hypothyroid rats. *Am J Physiol Heart Circ Physiol*

7. **Plato, C.F.**, Perry, A.M., Schonewald, M., Pitts, K.A., Glascock, C.B., Peng, Y., Lemon, D., Bush, E.W., McKinsey, T., Hartman, J.C., and Gorczynski, R.J. Novel thyromimetic compound LCJ-810 dose-dependently increases in cardiac performance and alpha-myosin heavy chain expression in hypothyroid rats. *J Pharmacol Exp Ther.*

8. **Plato, C.F.**, Rutledge, A.R., Glascock, C.B., Peng, Y., Pitts, K.A., Bush, E.W., and Hartman, J.C. High Salt Diet Exacerbates Isoproterenol-Induced Increases in Heart Weight Index and Downregulation of α-Myosin Heavy Chain Expression. *Am. J. Physiol. Regulatory Integrative Comparative Physiol*

9. **Plato, C.F.**, Rutledge, A.R., Schonewald, M., Glascock, C.B., Peng, Y., Pitts, K.A., Bush, E.W., Hartman, J.C., McCune, S.M., and Gorczynski, R.J. Strain-dependent cardiac responses to pressure-overload in male rats. *Circulation*

10. **Plato, C.F.**, Rutledge, A.R., Schonewald, M., Glascock, C.B., Peng, Y., Pitts, K.A., Bush, E.W., Hartman, J.C., McCune, S.M., and Gorczynski, R.J. Rapamycin attenuates and regresses catecholamine-induced cardiac hypertrophy in the absence of blood pressure

lowering effects. *Circ Res.*

11. **Plato, C.F.**, Perry, A.R., Pitts, K.A., Bush, E.W., Hartman, J.C., and Gorczynski, R.J. A novel method for producing uniform pressure-overload and cardiac hypertrophy in rats. *Am. J Physiol. Heart Circ Physiol.*

12. **Plato, C.F.**, Perry, A.R., Joly, K.M., Mckinsey, T.A., Pitts, K.R. Hartman, J.C., and Gorczynski, R.J. Effects of high salt intake on pressure overload induced cardiac hypertrophy and dysfunction. *Circ Res.*

13. Bush, E.W., McQuire, L., Gamber, G., **Plato, C.F.,** Pitts, K., Schreiber, K., McKinsey, T.A., Castonguay, L.A., Gorczynski, R.J., and Melvin, L. Novel thyromimetics lacking structural similarity to thyroid hormone regulate cardiac alpha myosin heavy chain expression. *Proc Nat Acad Sci. Submitted.*

14. **Plato, C.F.** Cavasin, M.A., Perry, A.R., Joly, K.M. and K.R. Pitts. Pan-HDAC inhibition dose-dependently prevents high salt induced cardiac hypertrophy, fibrosis, and diastolic dysfunction in Dahl S rats. *Circ Res.*

15. Liles, J.T. Ida, K.K., Joly, K.M. Chapo, J., and **Plato, C.F.** Age exacerbates chronic catecholamine-induced impairments in contractile reserve. *Am. J. Physiol – Heart Circ Physiol. Submittted.*

16. Cavasin, M.A., Semus, H., Pitts, K.R., Peng, Y., Sandoval, J., Chapo, J., and **Plato, C.F.** Acute effects of endothelin antagonists on hepatic hemodynamics of normal and cirrhotic rats. *Hepatology. Submitted.*

C. Abstracts:

1. Levandoski, S.G., J.L. Christie, L.M. Sheldahl, F.E. Tristani, and C.F. Plato. Comparison of cardiorespiratory and metabolic responses to upright treadmill and supine bicycle graded exercise. Clin. Res. 34: 320A, 1986.

2. Wenzler, R.B., L.M. Sheldahl, F.E. Tristani, A.B. Gustafson, S.G. Levandoski, J.L. Christie, J.L., and C.F. Plato. Effect of age on training adaptibility to aerobic exercise. Monogr. AHA 74 (Suppl 4, Part 2): 1998, 1986.

3. Hoffman, M.D., L.M. Sheldahl, R.B. Wenzler, C.F. Plato, S.G. Levandoski, S.G., J.H. Kalbfleisch, J.S. Dunnick, and F.E. Tristani. Cardiovascular responses in paraplegics during exercise with lower extremity compression. Clin. Res. 35: 287A, 1987.

4. Wenzler, R.B., L.M. Sheldahl, F.E. Tristani, J.L. Christie, A.B. Gustafson, S.G. Levandoski, and C.F. Plato. Effect of age on adaptation to aerobic exercise training. J. Am. Coll. Cardiol. 9: 235A, 1987.

5. Plato, C.F., J.H. Lombard, and J.L. Osborn. Elevated adrenergic sensitivity of renal vasculature is pressure dependent. FASEB J. 8: A582, 1994.

6. Parker, T.A., C.F. Plato, C.F., and J.L. Osborn. Neurogenic control of intrarenal hemodynamics and renal function during AII blockade with losartan. FASEB J. 8: A581, 1994.

7. Plato , C.F., and J.L. Osborn. Chronic renal neuroadrenergic hypertension is associated with volume contraction and increased renal vascular sensitivity to norepinephrine. FASEB J. 9: A296, 1995.

8. Plato, C.F., and J.L. Osborn. Long-term renal neuroadrenergic hypertension alters renal vascular reactivity. FASEB J. 10: A635, 1996.

9. Osborn, J.L., D.P. Whitehouse, and C.F. Plato. Intrarenal AT_1 receptor blockade enhances renal autoregulation in anesthetized dogs. FASEB J. 10: A372, 1996.

10. Plato, C.F., G.J. Bachowski, and J.L. Osborn. Renal neuroadrenergic hypertension upregulates α_2 adrenoceptors and downregulates AT_1 receptors. FASEB J. 11: A42, 1997.

11. Plato, C.F., X.-F. Li, and J.L. Osborn. Localization of renal α-adrenoceptor subtypes: Role in renal neuroadrenergic hypertension. J Am. Soc. Nephrol. 8:A1404, 1997.

12. Osborn, J.L., and C.F. Plato. Renal neuroadrenergic hypertension is caused by factors unrelated to angiotensin II. J. Am. Soc. Nephrol. 8: A1402, 1997.

13. Plato, C., and J. Garvin. Regulation of distal nephron transport by NO. Presented at Renal Hemodynamics: Integration of Endothelial, Epithelial and Vascular Control Mechanisms. 1998 FASEB Summer Research Conference, Saxtons River, Vt., June 27 - July 2, 1998.

14. Plato, C.F., D. Wang, and J.L. Garvin. Endogenous NO inhibits chloride flux in the thick ascending limb. Hypertension 32: 616, 1998.

15. Plato, C.F., and J.L. Garvin. Endothelin inhibits thick ascending limb (THAL) chloride flux via production of NO. J. Am. Soc. Nephrol. 9: 42A, 1998.

16. Plato, C.F., and J.L. Garvin. Endothelin inhibits chloride flux in the cortical thick ascending limb (cTHAL) *via* activation of the ET_B subtype receptor. FASEB J. 13: A724, 1999.

17. Plato, C., B. Stoos, and J. Garvin. Endothelin inhibits thick ascending limb transport by increasing endogenous production of NO. Hypertension 33: 1305, 1999.

18. Plato, C.F., and J.L. Garvin. Endothelial nitric oxide synthase mediates L-arginine induced inhibition of mouse thick ascending limb chloride flux. Hypertension 34: 360, 1999.

19. Plato, C.F., and J.L. Garvin. Alpha-2 adrenoceptors inhibit chloride flux in the cortical thick ascending limb (THAL) via activation of nitric oxide synthase. J. Am. Soc. Nephrol. 10: 41A, 1999.

20. Plato, C.F., and J.L. Garvin. Alpha-2 adrenoceptors inhibit and beta-adrenoceptors stimulate

chloride flux in the cortical thick ascending limb (cTHAL). FASEB J. 14: A342, 2000.

21. Plato, C.F. Norepinephrine's biphasic effects on cortical thick ascending limb (cTHAL) chloride flux are differentially mediated by alpha-2 and beta-adrenoceptors. J. Am. Soc. Nephrol. 11: 36A, 2000.

22. Plato, C.F. PI-3-kinase-dependent activation of eNOS mediates alpha-2 receptor induced inhibition of thick ascending limb transport. Hypertension, 2001.

23. Plato, C.F. High salt diet increases thick ascending limb eNOS expression and inhibitory effects of L-arginine on chloride flux. J. Am. Soc. Nephrol. 12, 2001.

24. Ortiz, P., B.A. Stoos, N.J. Hong, D.M. Boesch, C.F. Plato, and J.L. Garvin. High-salt diet increases sensitivity to NO and eNOS expression but not NO production in THALs. Hypertension

25. Plato, C.F., B.F. Cox, and G.A. Reinhart. Dopamine D_3-receptor activation produces hyperfiltration in normal but not streptozotocin-induced (STZ) diabetic rats. FASEB Journal 17: A587.23 2003.

26. Plato, C.F., Rutledge, A.R., Glascock, C.B., Peng, Y., Bowbeer, H., Bush, E.W., and Hartman, J.C. High Salt Diet Exacerbates Isoproterenol-Induced Increases in Heart Weight Index and Downregulation of α-Myosin Heavy Chain Expression. AHA Basic Cardiovascular Sciences Conference, Keystone, CO July, 2005.

27. Plato, C.F., K.M. Joly, C. Glascock, and K.R. Pitts. Histone deacetylase inhibition augments thyroid hormone (T_3)-induced increases in cardiac performance in hypothyroid rats. FASEB Journal 23: 812.12 2009.

28. Liles, J.T., K. Ida, K.M. Joly, J. Chapo, Y. Peng, and C.F. Plato. Age exacerbates chronic catecholamine-induced impairments in contractile reserve. FASEB Journal 23: 812.06 2009.

29. Cavasin, A.C., Y. Peng, J. Sandoval, J. Chapo, K.R. Pitts, and C.F. Plato. Acute effects of endothelin antagonists on hepatic hemodynamics of normal and cirrhotic rats. ***Poster to be presented at ET-11 Meeting, Montreal, CA, September 9-12, 2009***

30. Hu, L. and C.F. Plato. Sitaxsentan (SIT) Increases Extracellular Fluid Volume (ECFV) in both Normal Salt (NS) and High Salt-Fed (HS) Dahl S (DS) rats. ***Oral presentation to be given at ET-11 Meeting, Montreal, CA, September 9-12, 2009***

31. E.W. Bush, L. McQuire, G. Gamber, C.F. Plato, K.R. Pitts, J. Chapo, K. Schreiber, J. Kronlage, T.A. McKinsey, L.A. Castonguay, N. Pagratis, J. Todd, C. Glascock, Y. Peng, R.J. Gorczynski and L.S. Melvin. Potent and selective thyromimetics lacking structural similarity to thyroid hormone regulare cardiac myosin heavy chain expression. ***Submitted to American Heart Association, 2009 Scientific Sessions***.

D. Professional Reports:

1. Effects of ICI-25651 on Hemodynamic Responses to Endotoxin Lipopolysaccharide in Awake Rabbits, November, 1990.

2. Effects of Serotonin $5HT_{1a}$ Receptor Agonists on systemic Hemodynamics in the Conscious Cynomolgus Monkey, May, 2002.

3. Effects of Abbott-408778 and Abbott-408892 on Human Platelet Function *in vitro*, December, 2002.

4. Effects of Abbott-425769 on Hemodynamic and Electrocardiographic Function in the Conscious Monkey, February, 2003.

5. Acute Renal Excretory and Cardiovascular Responses to Vasopressin V_{1b} Antagonism in Conscious Rats September, 2003.

X. REFERENCES - Available upon request.