
BIOGRAPHICAL SKETCH

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|---|--|---------|-------------------|
| NAME Jeannine S. McCune | POSITION TITLE Associate Professor, UW Affiliate Investigator, FHCRC | | |
| eRA COMMONS USER NAME JMCCUNE | | | |
| EDUCATION/TRAINING (<i>Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.</i>) | | | |
| INSTITUTION AND LOCATION | DEGREE (if applicable) | YEAR(s) | FIELD OF STUDY |
| University of Pittsburgh. Pittsburgh, PA. | B.S. | 1993 | Pharmacy |
| University of North Carolina. Chapel Hill, NC. | PharmD | 1995 | Clinical Pharmacy |

A. Positions.

- 1995 – 1996 Residency in Hematology/Oncology & Clinical Instructor. University of North Carolina, Division of Pharmacotherapy.
- 1996 – 1998 Fellowship in Drug Metabolism & Clinical Instructor. University of North Carolina, Division of Pharmacotherapy.
- 1998 – 2005 Assistant Professor. University of Washington Department of Pharmacy.
- 1998 – Affiliate Investigator. Fred Hutchinson Cancer Research Center Clinical Research Division.
- 2003 – Member, University of Washington Institute for Public Health Genetics.
- 2003 – Clinical Director, Seattle Cancer Care Alliance Busulfan Pharmacokinetic Laboratory.
- 2005 – Associate Professor. University of Washington Department of Pharmacy.

Other Professional Experiences.

- 2003 – 2006 Chair, Hematologic and Neoplastic Diseases, and Member, Coordinating Committee on Scientific Sections, American Society for Clinical Pharmacology and Therapeutics

Honors.

- 1991 – Rho Chi National Pharmacy Honor Society
- 1993 – Phi Lambda Sigma Leadership Society
- 1994 – 1995 American Foundation for Pharmaceutical Education Marion Merrell Dow Fellowship in Clinical Pharmacy Science

Awards and Professional Activities.

- 2005 – present COG ARST0531 Study Committee Member
- 2005 – present COG ANBL0532 Study Committee Member
- 2003 – present COG ANBL02P1 Study Committee Member

B. Selected peer-reviewed publications (from 41 publications).

1. McCune JS, Lindley C. The Appropriateness of Vincristine Dosage Guidelines. *Am J Health-Syst Pharm* 1997; 54: 1755-8.
2. McCune JS, Hawke RL, LeCluyse EL, Gillenwater HH, Hamilton G, Ritchie J, Lindley C. In-vivo and In-vitro Induction of Human Cytochrome P4503A4 by Dexamethasone. *Clin Pharmacol Ther* 2000; 68: 356-66.
3. Donahue A, McCune JS, Faucette S, Gillenwater HH, Socinski MA, Lindley C. Comparison of Glomerular Filtration Rate Estimations in Cancer Patients: Impact on Carboplatin Dose Calculated with the Calvert Equation. *Cancer Chemother Pharmacol* 2001; 47 (5): 373-379.
4. Lindley C, Faucette SR, McCune JS, Hawke RL, Hamilton G, Gilbert D, Jolley S, LeCluyse EL. The Effect of Cyclophosphamide with and without Dexamethasone on Cytochrome P450 3A4 and 2B6 Activity in Human Hepatocytes. *Drug Metab Dispos* 2002; 30:814-21.

5. McCune JS, Gooley T, Gibbs JP, Sanders JE, Petersdorf EW, Appelbaum FR, Anasetti C, Risler L, Sultan D, Slattery JT. Busulfan Concentration and Graft Rejection In Pediatric Patients Undergoing Hematopoietic Stem Cell Transplantation. *Bone Marrow Transplant* 2002 Aug;30(3):167-73.
6. McCune JS, Friedman DL, Schuetze S, Blough D, Magbulos M, Hawkins DS. The Influence of Age upon Ifosfamide-induced Nephrotoxicity. *Pediatr Blood Cancer* 2004; 42: 427-32..
7. McCune JS, Hatfield AJ, Rendleman AA, Leith PO, Livingston RB, Ellis GK. Potential of Chemotherapy-Herb Interactions in Adult Cancer Patients. *Supportive Care in Cancer*, 2004 Jun;12(6):454-62.
8. Lindley C, Shea T, McCune J, Shord S, Decker J, Harvey RD, Petros W, Garbriel D, Serody J, Kirby S, Wiley J. Intraindividual variability in busulfan pharmacokinetics in patients undergoing a bone marrow transplant: assessment of a test dose and first dose strategy. *Anti-cancer Drugs* 2004 Jun;15(5):453-9.
9. Iacono LC, Adams D, Homans AC, Guillot A, McCune JS, Stewart CF. Topotecan disposition in an anephric child. *J Pediatr Hematol Oncol*. 2004 Sep;26(9):596-600.
10. McCune JS, Risler LJ, Phillips BR, Thummel KE, Blough D, Shen DD. Contribution of CYP3A5 to hepatic and renal ifosfamide N-dechloroethylation. *Drug Metab Dispos*. 2005 Jul;33(7):1074-81.
11. Kalthorn TF, Ren AG, Slattery JT, McCune JS, Wang J. A highly sensitive high-performance liquid chromatography-mass spectrometry method for quantification of fludarabine triphosphate in leukemic cells. *J Chromatogr B Analyt Technol Biomed Life Sci*. 2005 Jun 25;820(2):243-50. Epub 2005 Apr 21.
12. Carpenter PA, Lowder J, Johnston L, Frangoul H, Khoury H, Parker P, Jerome KR, McCune JS, Storer B, Martin P, Appelbaum F, Abonour R, Westervelt P, Anasetti C. A phase II multicenter study of visilizumab, humanized anti-CD3 antibody, to treat steroid-refractory acute graft-versus-host disease. *Biol Blood Marrow Transplant*. 2005 Jun;11(6):465-71.
13. Nash RA, Johnston L, Parker P, McCune JS, Storer B, Slattery JT, Furlong T, Anasetti C, Appelbaum FR, Lloid ME, Deeg HJ, Kiem HP, Martin PJ, Schubert MM, Witherspoon RP, Forman SJ, Blume KG, Storb R. A phase I/II study of mycophenolate mofetil in combination with cyclosporine for prophylaxis of acute graft-versus-host disease after myeloablative conditioning and allogeneic hematopoietic cell transplantation. *Biol Blood Marrow Transplant*. 2005 Jul;11(7):495-505.
14. Lush RM, McCune JS, Tetteh L, Thompson JA, Mahany JJ, Garland L, Suttle AB, Sullivan DM. The absolute bioavailability of oral vinorelbine in patients with solid tumors. *Cancer Chemother Pharmacol*. 2005 Dec;56(6):578-84.
15. Oestreicher N, Ramsey SD, Linden HM, McCune JS, van't Veer LJ, Burke W, Veenstra DL. Gene expression profiling and breast cancer care: what are the potential benefits and policy implications? *Genet Med*. 2005 Jul-Aug;7(6):380-9.
16. Giaccone L, McCune JS, Maris MB, Gooley TA, Sandmaier BM, Slattery JT, Cole S, Nash RA, Storb RF, Georges GE. Pharmacodynamics of mycophenolate mofetil after nonmyeloablative conditioning and unrelated donor hematopoietic cell transplantation. *Blood*. 2005 Dec 15;106(13):4381-8. Epub 2005 Sep 6.
17. McDonald GB, McCune JS, Batchelder A, Cole S, Phillips B, Ren AG, Vicini P, Witherspoon R, Kalthorn TF, Slattery JT. Metabolism-based cyclophosphamide dosing for hematopoietic cell transplant. *Clin Pharmacol Ther*. 2005 Sep;78(3):298-308.
18. McCune JS, Adams D, Homans AC, Guillot A, Iacono L, Stewart CF. Cyclophosphamide disposition in an anephric child. *Pediatr Blood Cancer*. 2006 Jan;46(1):99-104.
19. Gillenwater HH*, McCune JS*, Lindley C, Stewart CF, Faucette S, Zamboni WC, Kirstein MN, Shord SS, Donahue A, Moore D, Socinski MA. A Phase I Trial Defining The Maximum Tolerated Systemic Exposure Of Topotecan In Combination With Carboplatin And Etoposide In Extensive Stage Small Cell Lung Cancer. *Cancer Investigations* 2005; 23 (6): 511-9. *shared first authorship.
20. Oestreicher N, Veenstra DL, Linden HM, McCune JS, van 't Veer LJ, Ramsey SD. The Cost of Adjuvant Chemotherapy in Early Stage Breast Cancer Patients. *Cancer*, 2005 Nov 15; 104(10):2054-62.
21. Kalthorn TF, Howald WN, Cole S, Phillips B, Wang J, Slattery JT, McCune JS. Rapid Quantitation of Cyclophosphamide Metabolites in Plasma by Liquid Chromatography-Mass Spectrometry. *J Chromatogr B Analyt Technol Biomed Life Sci*. 2006 May 1;835(1-2):105-13. Epub 2006 Apr 11
22. Deeg HJ, Storer BE, Boeckh M, Martin PJ, McCune JS, Myerson D, Heimfeld S, Flowers ME, Anasetti C, Doney KC, Hansen JA, Kiem HP, Nash RA, O'donnell PV, Radich JP, Sandmaier BM, Scott BL, Sorrow ML, Warren EH, Witherspoon RP, Woolfrey A, Appelbaum FR, Storb R. Reduced Incidence of Acute and

- Chronic Graft-versus-Host Disease with the Addition of Thymoglobulin to a Targeted Busulfan/Cyclophosphamide Regimen. *Biol Blood Marrow Transplant*. 2006 May;12(5):573-84.
23. Salinger D, McCune JS, Ren A, Shen DD, Slattery JT, McDonald GB, Vicini P. Development of a Novel Method for Real-time Dose Adjustment of Cyclophosphamide Using Bayesian Pharmacokinetic Modeling. *Clin Cancer Res* 2006 12: 4888-4898.
 24. Lupu M, McCune JS, Kuhr CS, Gooley T, Storb R. Pharmacokinetics of oral mycophenolate mofetil in dog: bioavailability studies and the impact of antibiotic therapy. *Biol Blood Marrow Transplant* 2006 Dec;12(12):1352-4. 34.
 25. Upton A, McCune JS, Kirby KA, Leisenring W, McDonald G, Batchelder A, Marr KA. Fluconazole Coadministration Concurrent with Cyclophosphamide Conditioning May Reduce Regimen-Related Toxicity Post-myeloablative Hematopoietic Cell Transplantation. *Biol Blood Marrow Transplant* 2007 Jul;13(7):760-4. Epub 2007 Apr 30.
 26. McCune JS, Batchelder A, Deeg HJ, Gooley T, Cole S, Phillips B; Schoch HG, McDonald GB. Cyclophosphamide Following Targeted Oral Busulfan As Conditioning For Hematopoietic Cell Transplantation: Pharmacokinetics, Liver Toxicity, And Mortality. *Biol Blood Marrow Transplant* 2007 Jul;13(7):853-62.
 - 27.. Woodahl EL, Hingorani SR, Wang J, Guthrie KA, McDonald GB, Batchelder A, Li M, Schoch HG, McCune JS. Pharmacogenomic Associations In ABCB1 and CYP3A5 With Acute Kidney Injury and Chronic Kidney Disease After Myeloablative Hematopoietic Cell Transplantation, *Pharmacogenomics J*. 2008 Aug;8(4):248-55. Epub 2007 Aug 14.
 28. Woodahl EL, Wang J, Heimfeld S, Sandmaier BM, O'Donnell PV, Phillips B, Risler L, McCune JS. Fludarabine Triphosphate Accumulation In CD4+ And CD8+ T-Lymphocytes From Patients Awaiting Hematopoietic Cell Transplantation. *Cancer Chemother Pharmacol*, SEP 2008 62 (4): 735-739. Epub 2007 Nov 15.
 29. Woodahl EL, Wang J, Heimfeld S, Ren AG, McCune JS. Imatinib Inhibition Of Fludarabine Uptake In T-Lymphocytes. *Cancer Chemother Pharmacol*, Epub 2008 Apr 9.
 30. Woodahl EL, Wang J, Heimfeld S, McCune JS. Intracellular Disposition Of Fludarabine In Human Natural Killer Cells. *Cancer Chemother Pharmacol*, accepted for publication August 2008. (NIHMS 66833)
 31. Eberly AL, Anderson GD, Bubalo JS, McCune JS. Optimal Prevention of Busulfan-induced Seizures. *Pharmacotherapy*, accepted for publication July 2008.
 32. McCune JS, Salinger DH, Vicini P, Phillips B, Oglesby C, Park JR. Pharmacokinetics of Cyclophosphamide and Metabolites in Children with Neuroblastoma. *J Clin Pharmacol*, accepted for publication August 2008.

C. Research Support

ACTIVE

R01 HL091744 (McCune, JS) 3/1/08-12/30/11 2.4 cal months
NIH/NHBLI

Population Pharmacokinetics/ Pharmacodynamics in Nonablative Stem Cell Recipients

These studies will evaluate the association of candidate biomarkers with donor chimerism in nonmyeloablative hematopoietic stem cell transplant recipients. The candidate biomarkers are two types of patient-specific factors – the pharmacokinetics, characterized using population pharmacokinetic models, and immediate pharmacodynamic endpoints - to two drugs, fludarabine and mycophenolate.

R21 AT 002712-02 (Shen, DD) 6/1/05-5/31/08 0.60 cal month
NIH/NCCAM

Garlic Metabolism and Cytochrome P450 Modulation

This study will evaluate the effects of garlic supplements on cytochrome P450 and pglycoprotein activity in humans.

SUB TE 4423 (Park, JR) 10/1/05-9/30/09 0.60 cal month
CHRM

Genetic Predisposition to Chemotherapy Toxicity in Children Receiving Cyclophosphamide (CY)

The aim of this study is to analyze the relationship of genetic polymorphisms in CY-metabolizing enzymes and PK of following CY administration of different CY doses

648065 K6 (Ramsey, SD) 9/15/06-9/15/09 0.6 cal month
AMGEN

A retrospective evaluation of colony-stimulating factor use in patients with breast and lung cancer
Investigators will measure patterns of CSF use in patients receiving treatment for breast and lung cancer, and compare health outcomes and costs for patients receiving filgrastim or pegfilgrastim as primary prophylaxis vs. secondary therapy. A simulation model will be constructed using these data.

(Ramsey, SD) 7/26/07-1/31/09 0.6 cal month
AMGEN

Identifying Patterns of Care and Health-Care Utilization for Lung and Breast Cancer Patients Using a Linked Cancer Registry and Claims Database

The goal of this study is to characterize the health care resource utilization and healthcare costs among publicly and privately-insured patients with metastatic breast cancer or metastatic lung cancer in the Washington State.

(Ramsey) 11/07/05-05/31/09 0.6 cal month
AMGEN

Determinants and Consequences of Early Discontinuation of Planned Chemotherapy for Persons with Early Stage Breast and Colorectal Cancer

Investigators will determine clinical and socio-demographic factors associated with not completing initial planned cancer chemotherapy for persons with local and regional-stage breast and colorectal cancer. The study team will also analyze the relationship between completion of chemotherapy and survival

Completed Research Support

P01 CA 18029-28 (Appelbaum, FR) 12/01/01-11/30/06 2.4 cal month
NIH/NCI

Adult Leukemia Research Center

Overall goal is to improve the outcome of allogeneic hematopoietic cell transplantation in the treatment of hematologic malignancies.

Sub-Project: Core D (Pharmacology) Project Leader: Wang, J.
To relate actual exposure of drugs or active metabolites to treatment outcome.

Project 4 (Regimen related mortality) Project Leader: McDonald GB
Improve survival after HCT by eliminating mortality due to liver toxicity of the transplant preparative regimen.

SUB (McCune, JS) 4/1/05-3/31/06 0.12 cal month

St. Jude Children's Research Hospital (SJCRH) \$20,000

Analysis of Cyclophosphamide and metabolites

To assess the pharmacokinetics of cyclophosphamide in children with medulloblastoma who treated at SJCRH.

SUB (McCune, JS) 6/1/05-5/31/07 0.12 cal month

Oregon Health Sciences University

Analysis of cyclophosphamide and metabolites (OHSU)

To evaluate if aprepitant interacts with the pharmacokinetics of busulfan or cyclophosphamide.

CON (McCune, JS) 2/1/07-2/29/08 0.24 cal month

PDL BioPharma

Busulfan Pharmacokinetics

A retrospective evaluation of the association of GSTA1 genetic polymorphisms with the pharmacokinetics of IV busulfan.