

Steven P. Stodghill, Ph.D.
Curriculum Vitae

Home:

3052 Possum Trot Road
Greenbrier, TN 37073
(615) 643-4994
Cell: 615-967-4905

Work:

1900 Belmont Blvd.
School of Pharmacy
Nashville, TN 37212-3757
615-460-6533
Steven.stodghill@belmont.edu

CITIZENSHIP

United States of America

EDUCATION

- 1/95-11/00 Ph.D. Pharmaceutics
Department of Pharmaceutics
University of Mississippi
Graduate Advisor: Dr. Christy M. Wyandt
- 7/89-7/90 Hospital Pharmacy Residency
University of Cincinnati Medical Center
A.S.H.P. Accredited Program
- 8/83-5/89 Bachelor of Science in Pharmacy
University of Mississippi
School of Pharmacy

EMPLOYMENT

- 1/08 – Present **Associate Professor, Pharmaceutical Sciences
and Director of Assessment**
School of Pharmacy
Belmont University – Nashville, TN
- 11/05 – 12/07 **Associate Professor**
Department of Pharmaceutical Sciences
School of Pharmacy
South University – Savannah, GA
- 10/00- 11/05 **Assistant Professor**
Department of Pharmaceutics
School of Pharmacy
University of Mississippi
- Assistant Research Professor**
Research Institute of Pharmaceutical Sciences
University of Mississippi
- 7/90-6/95 **Clinical Pharmacist**
Baptist Memorial Hospital
Memphis, Tennessee
DUE Coordinator, Staff Continuing Education Coordinator,
Infectious Disease, Internal Medicine

Adjunct Assistant Professor
University of Mississippi
Clinical Clerkship Preceptor

10/95-1/97

Pharmacist
Wal-Mart Inc.
Holly Springs, Mississippi
Senatobia, Mississippi

RESEARCH PUBLICATIONS

Polymeric Systems for Amorphous Δ^9 -Tetrahydrocannabinol Produced by a Hot-Melt Method. Part 1: Chemical and Thermal Stability During Processing. M. Munjal, **S. P. Stodghill**, M.A. Elsohly, M.A. Repka. *J. Pharm. Sci.*, 95, (8) 2006.

S. Prodduturi, R.V. Manek, W.K. Kolling, **S.P. Stodghill**, M.A. Repka, "Solid-state stability and characterization of hot-melt extruded poly(ethylene oxide) films." *J. Pharm. Sci.*, 94(10), 2005.

S.P. Stodghill, A.C. Illapakurthy, Wyandt, C.M. Isothermal Titration Calorimetry Method for Determination of Cyclodextrin Complexation Thermodynamics Between Artemisinin and Naproxen Under Varying Environmental Conditions. *Eur. J. of Biopharm. and Pharm.* (59) 2, 325-332, 2005

M. A. Repka, K. Gutta, S. Prodduturi, M. Munjal, **S.P. Stodghill**
Title: "Characterization of Cellulosic Hot-Melt Extruded Films containing Lidocaine". *Eur. J. Pharm. Biopharm.* (59) 1, 2005, 189-196.

S.P. Stodghill, A.E. Smith, J.H. O'Haver, "Thermodynamics of micellization and adsorption of three alkyltrimethylammonium bromides using isothermal titration calorimetry." *Langmuir*, (20) 11387-11392, 2004.

S. S. Tumuluri, S. Prodduturi, M. M. Crowley, **S. P. Stodghill**, J. W. McGinity, M.A. Repka and B. A. Avery, The use of Near-Infrared Spectroscopy for the Quantitation of a Drug in Hot-Melt Extruded Films. *Drug Devel. Ind. Pharm* (30) 5, 505-511, 2004.

M. A. Repka, P. Mididoddi, **S. P. Stodghill**
Title: "Influence of "Etching" on Human Nails for the Assessment of Treatment Modalities for Onychomycosis". *Int. J. Pharm.* 282, 2004, 95-106

S. Prodduturi, R.V. Manek, W.M. Kolling, **S.P. Stodghill**. M.A. Repka
Title: "Water Vapor Sorption Of Hot-Melt Extruded Hydroxypropyl Cellulose Films: Effect On Physico-Mechanical Properties And Release Characteristics" *J. Pharm. Sci.* (93), 12, 2004, 3047-3056.

M. A. Repka, S. Prodduturi and **S. P. Stodghill** "Production and Characterization of Hot-Melt Extruded Films containing Clotrimazole" *Drug Devel. Ind. Pharm.* (29) 7, 2003, 757-765.

S.P. Stodghill, Book Review: Pharmaceutical and Clinical Calculations, 2nd Ed., *Journal of Pharmacy Teaching*, 9(1) accepted 7/00.

S.P. Stodghill, Ascorbic Acid; Monograph, Handbook of Pharmaceutical Excipients 4th Edition, 2001.

S.P. Stodghill, Magnesium Carbonate; Monograph, Handbook of Pharmaceutical Excipients 4th Edition, 2001.

PRESENTATIONS

Curriculum SIG: From paper to pixels: Electronic curricular mapping and outcomes management: Podium Presentation/Roundtable presented at AACP Annual Meeting, Chicago, IL, July 2008. Presenters: David F. Maize, University of the Incarnate Word; Lauren S. Schlesselman, University of Connecticut; **Steven P. Stodghill, Belmont University**; David D. Trang, University of Incarnate Word

Strong Foundation + 4 Pillars = Belmont University's Pharmacy Plus Curriculum. **S.P. Stodghill, J. Rafferty**. Presented at AACP Annual Meeting, Chicago, IL, July 2008.

Adsorption of Hydrocortisone Into Pluronic F127 (Lutrol F127) Admicelles. A Surfactant-Templated Novel Drug Delivery Platform. N. Pavuluri, J. O'Haver, **S. Stodghill**. Presented at the AAPS Annual Meeting, San Antonio, TX, November 2006.

Thermodynamics of Micellization of Pluronic F127, A Difunctional Triblock Copolymer by Isothermal Titration Calorimetry. N. Pavuluri, J. O'Haver, **S. Stodghill**. Presented at the AAPS Annual Meeting, San Antonio, TX, November 2006.

Authors: M. Jacob, S. Prodduturi, S. Khan, M.A. Repka, **S.P. Stodghill**, Increasing the effectiveness of antifungal drugs using poly(ethylene oxide) and/or hydroxypropyl cellulose in the formulation. American Association of Pharmaceutical Scientists National Meeting. November 2005, Nashville, TN

Authors: N. Pavuluri, J. O'Haver, **S.P. Stodghill**
Adsolubilization of Hydrocortisone in Triton X-100 Admicelles. in American Association of Pharmaceutical Scientists National Meeting. November 2005, Nashville, TN

Authors: M. Munjal, M.A. Repka, **S.P. Stodghill**
Stability Indicating HPLC Method and Screening of Hyoscyamine Sulfate for Hot-Melt Extrusion. . in American Association of Pharmaceutical Scientists National Meeting. November 2005, Nashville, TN

Authors: P. Builders, M. Emeje, O. Kunle, M.M. de Villiers, W.M. Kolling, **S.P. Stodghill**
Isolation, characterization and formulation studies of starch obtained from *Cyperus esculentus L.* . in American Association of Pharmaceutical Scientists National Meeting. November 2005, Nashville, TN

A. Shaw, J. Williamson, **S. Stodghill**, C. Wyandt. Characterization of a novel tubulin binding agent and comparison with taxol. *AAPS PharmSci*, accepted for presentation at the Annual AAPS National Meeting, November 2004, Baltimore, MD.

S. Prodduturi, A. Shah, **S. Stodghill**, B. Avery, M. Repka. Stability-indicating HPLC method development and validation for determination of clotrimazole in hot-melt extruded polymeric matrices. *AAPS PharmSci*, accepted for presentation at the Annual AAPS National Meeting, November 2004, Baltimore, MD.

P.K. Mididoddi, **S.P. Stodghill**, M.A. Repka. Physico-chemical Properties and Stability Studies of ketoconazole-incorporated Hot-melt Extruded Films for Onychomycosis, *AAPS PharmSci*, accepted for presentation at the Annual AAPS National Meeting, November 2004, Baltimore, MD.

S. Prodduturi, R. V. Manek, W. M. Kolling, **S. P. Stodghill**, M. A. Repka, Hot-melt Extruded Polymeric Films for Transmucosal Drug Delivery: Tailoring Properties Using Polymer Blends, *AAPS PharmSci*, accepted for presentation at the Annual AAPS National Meeting, November 2004, Baltimore, MD.

S. Prodduturi, S. Thumma, M. R. Jacob, **S. P. Stodghill**, M. A. Repka, Hot-melt Extrusion of Thermally Stable and Unstable Model Antifungal Drugs: Process Variables and Formulation Evaluation, *AAPS PharmSci*, accepted for presentation at the Annual AAPS National Meeting, November 2004, Baltimore, MD.

S. Prodduturi, K. L. Urman, J. Otaigbe, **S. P. Stodghill**, M. A. Repka, Dynamic Mechanical Analysis: Determining the Mechanical Properties and Glass Transition Temperatures of Hot-melt Extruded Hydroxypropyl Cellulose Films, *AAPS PharmSci*, accepted for presentation at the Annual AAPS National Meeting, November 2004, Baltimore, MD.

M. Munjal, **S.P. Stodghill**, M.A. Repka, Formulating Solid Dispersions of Amorphous Poorly Water-Soluble Tetrahydrocannabinol, *AAPS PharmSci*, accepted for presentation at the Annual AAPS National Meeting, November 2004, Baltimore, MD.

Michael A. Repka, S. Prodduturi, **Steven. P. Stodghill**. Evaluation of Hot-Melt Extruded Films Containing Antifungals for the Treatment of Oral Candidiasis, IADR/AADR International Annual Meeting, *Journal of Dental Research*, Vol. 83, Issue A, March (2004).

A.K. Dutta, P. Desai, **S.P. Stodghill**, C.M. Wyandt, "Complexation of Hydroxypropyl-Betacyclodextrin with a Novel Antimalarial Drug, 8-Aminoquinoline." in American Association of Pharmaceutical Scientists National Meeting. October 2003, Salt Lake City, UT.

P.K. Mididoddi, **S.P. Stodghill**, M.A. Repka, "Influence of "Etching" on the Permeability of Ketoconazole Through the Human Nail." in American Association of Pharmaceutical Scientists National Meeting. October 2003, Salt Lake City, UT.

Title: "Thermal analysis in the physical characterization of select nutraceuticals."

Authors: **S.P. Stodghill**, Pavuluri, N.

Location: Toronto, Canada AAPS Annual Meeting

Date: November, 2002

Title: "Prediction of Complexation Free Energies Between Various Drugs and Hydroxypropyl Beta Cyclodextrin Using Molecular Modeling."

Authors: A. C. Illapakurthy, Y. A. Sabnis, **S. P. Stodghill**, C. M. Wyandt

Location: Toronto, Canada AAPS Annual Meeting

Date: November, 2002

Title: "Drug content and adhesive uniformity of Hot-melt extruded hydroxypropyl cellulose films containing clotrimazole,."

Authors: S. Prodduturi, **S. P. Stodghill**, M. A. Repka.

Location: Toronto, Canada AAPS Annual Meeting

Date: November, 2002

Title: "Solid-state characterization of Hot-melt extruded films containing a model antifungal agent."

Authors: S. Prodduturi, **S. P. Stodghill**, M. A. Repka.

Location: Toronto, Canada AAPS Annual Meeting

Date: November, 2002

Title; "Characterization Of The Solid-State Desolvation Kinetics Of Cloxacillin, Dicloxacillin And Nafcillin Monohydrate Using Nonisothermal Gravimetric Analysis."

Authors: **S.P. Stodghill**, C.M. Wyandt

Location: American Association of Pharmaceutical Scientists National Meeting, Denver, CO
Date: October, 2001

Title: "Interpretation Of Nonisothermally Calculated Activation Energies Of Desolvation Using Molecular Dynamics And Dynamic Water Sorption Studies."

Authors: **S.P. Stodghill**

Location: American Association of Pharmaceutical Scientists National Meeting, Denver, CO

Date: October, 2001

Title: "The Use of Nonisothermal Gravimetric Analysis and FT-NIR in the Characterization of the Desolvation of a Series of Penicillin Derivative Monohydrates in the Solid-State."

Authors: **S.P. Stodghill**, C.M. Wyandt

Location: American Association of Pharmaceutical Scientists National Meeting, New Orleans, LA

Date: November, 1999

TEACHING

Belmont University

Pharmaceutics I and Lab (PHM 6100)

Pharmaceutics II and Lab (PHM 6140)

South University

Pharmaceutical Calculations (PHA 3120)

Pharmaceutics I, Co-coordinator (PHA 3105)

Pharmaceutics II, Co-coordinator (PHA 3106)

Integrated Pharmacy Skills Lab I-IV, Co-coordinator (PHA 3135-38)

Veterinary Pharmacy – Elective, Co-coordinator (PHA 5345)

University of Mississippi

Undergraduate Courses

Pharmaceutical Calculations (PHAR331)

Biopharmaceutics and Pharmacokinetics (PHAR434)

Problems in Clinical Pharmacy: Pharmacokinetics (PRCT 542)

University Studies (US101)

Graduate Courses

Seminars in Current Pharmaceutical Topics (PHARM 544)

Special Problems In The Stability Of Pharmaceutical Systems (PHAR 644)

Pharmaceutical Data Analysis and Interpretation (PHAR 646)

Problems in Pharmaceutics: Mesoscale Molecular Modeling (PHAR 541)

Solid-State Chemistry of Pharmaceuticals

Theses and Dissertations (University of Mississippi)

Co-Advisor, Dissertation

Nina Pavuluri, Candidate for Ph.D. in Pharmaceutics

"Utilization of Adsolubilization and Admicells in the Enhancement of Bioavailability and Solid-State Stability of Poorly Soluble Drugs."

Successfully Defended: 5/08

Co-Advisor and Thesis Committee Member

Adam Smith, Master's Student in Chemical Engineering

"Thermodynamics of Admicelle Formation and Adsolubilization in Admicelles Comprised of C₁₂TAB, C₁₄TAB and C₁₆TAB Cationic Surfactants and Porous Silica Spheres."

Successfully Defended: 5/04

Dissertation Committee Member

Suneela Prodduturi, Candidate for Ph.D. in Pharmaceutics

"Hot-melt extruded sustained release muco-adhesive films for Intra-oral drug delivery – Formulation, production and characterization"

Successfully Defended: August, 2004

Dissertation Committee Member

Yongqiang Tan, Candidate for Ph.D. in Chemical Engineering

"Experimental and Modeling Investigations of Styrene Adsolubilization in Nonionic Surfactant Admicelles."

Prospectus defended December 2003

Successfully Defended: May, 2004

Dissertation Committee Member

Chun Hwa See, Candidate for Ph.D. in Chemical Engineering

"Investigations of the Admicellar Polymerization Process"

Prospectus defended December, 2003

Successfully Defended : May, 2004

Dissertation Committee Member

Amit Shah, Candidate for Ph.D. in Pharmaceutics

"Loss Of Important Anti Cancer Agents Due To In-Vitro Screening Procedures: Case Study Of A Novel Tubulin Binding Agent, Characterization And Improving Utility Of The Compound"

Prospectus defended: 12/18/03

Dissertation Committee Member

Asish K. Dutta, Candidate for Ph.D. in Pharmaceutics

"Physiochemical Characterization of NPC 1161C and its Cyclodextrin Complexes in Solution State."

Prospectus defended: 2/05/04

Dissertation Committee Member

Praveen Mididoddi, Candidate for Ph.D. in Pharmaceutics

"Hot-Melt Extruded Drug Delivery Systems for Onychomycosis and other Fungal Infections."

In Progress

Dissertation Committee Member

Parag Budukh, Candidate for Ph.D. in Pharmaceutics

"Application of Isothermal Titration Calorimetry in Assessment of Protein Activity."

In Progress

Dissertation Committee Member

Shreekar Cheboyina, Candidate for Ph.D. in Pharmaceutics
“Freeze Pelletization Technique for the Preparation of Oral Immediate and Controlled Release Matrix Pellets.”
Prospectus Defense Scheduled for 5/11/04

Dissertation Committee Member
Ashok Chandra Illapakurthy
“Analysis of multi phase solubility diagrams involving competitive complexation” &
“Molecular modeling of cyclodextrin complexes of various drugs to predict the free energy of complexation.”
Completed June 2003

Dissertation Committee Member
Shilpa Prakash Kandhari
“Erythrocytic uptake studies for artemisinin and select analogs using LC-MS”
Completed May, 2003

Grants and Contracts Submitted

“Novel Topical Therapy for Onychomycosis”
Principal Investigator: M.A. Repka/Oxford PolyScience Corp.
Principal Investigator at UM: **S.P. Stodghill**
Agency: NIAID/NIH
Type/Amount: STTR/\$99,998
Period: 07/05-06/06
Score received : 215 (program funded at 209)
Planned resubmission August, 1st, 2005

Grants and Contracts Received

“Chemical stability of select compounds in a novel suspending agent”
Principle Investigators: M. Marvanova and S. P. Stodghill
Agency: Gallipot Inc.
Amount: \$150,000 over 2 years
Period: 03/08 -

“Center of Research Excellence in Natural Products Neuroscience (CORE-NPN)”
National Institutes of Health, NCR
Principal Investigator: Rae Matsumoto
Direct Cost: \$8,000,000
Total Cost: \$11,300,000
Submitted October 20, 2004
Individual Project Proposal: “Characterization, Formulation and Evaluation of THC Prodrugs for Oral Transmucosal Delivery”
PI of Individual Project: M.A. Repka
Co-PI of Individual Project : **S. P. Stodghill**
Total Costs: \$1,117,000

“Antifungal Denture Adhesive Film for Oral Candidiasis”
Principal Investigator: Thomas G. Gerding

Principal Investigator at Research Institution: M. A. Repka;
CoPI: **Steven P. Stodghill**
Agency: NIDCR/NIH
Grant # R43 DE 15455-01
Type/Amount: SBIR/\$99,923
Period: 03/04-03/06
Effort: 15%

Transmucosal Matrix Patch System for Delivery of an antihistamine
Principle Investigator: Michael A. Repka
Co-PI: **Steven P. Stodghill**
Agency: Industry/Wraser Pharmaceuticals
Amount: \$59,451
Period: 03/05 – 11/05
Effort: 5%

"Pharmaceutics and Pharmacy Skills Laboratory, Phase I"
Co-PIs: M.A. Repka, B.A. Avery and **S.P. Stodghill**
Agency: University of Mississippi's Instructional Equipment Proposal
Date: 09/03
Amount: \$46,240

"Pharmaceutics and Pharmacy Skills Laboratory, Phase II"
Co-PIs: M.A. Repka, B.A. Avery and **S.P. Stodghill**
Agency: University of Mississippi's Instructional Equipment Proposal
Date: 10/04
Amount: \$18,000

Summer Graduate Research Assistantship
For Nina Pavuluri Department of Pharmaceutics graduate student.
PI : S.P. Stodghill
Agency: University of Mississippi Graduate School
Summer 2004

"Utilization of Adsolubilization and Admicelles in the Enhancement of Bioavailability and Solid-State Stability of Poorly Soluble Drugs."
PI: Steven Stodghill
Granting Agency: University of Mississippi, Faculty Small Grants Program
Date: 3/2003-3/2004
Amount: 3,000.00

International Society of Lyophilization-Freeze Drying Equipment Donation Program. (A competitive program in which proposals are submitted regarding used equipment available from the society.)
Equipment received : Virtis Freezemobile 12 freeze dryer with Unitop drying chamber.
PI: Steven P. Stodghill
Date: 07/2002
Amount: approximately \$15,000.00

"Thermal Analytical Techniques for Determining the Stability and Compatibility of Nutraceuticals"
PI: Steven Stodghill

Granting Agency: University of Mississippi Faculty Small Grants Program
Date: 5/2001-5/2002
Amount: 3,280.00

“Subscription to Cambridge Crystallographic Database”
PI: Steven Stodghill
Granting Agency: University of Mississippi Partner’s Grant
Date: 1/2002-12/2002
Amount: 500.00

Un-sponsored Research

"Physio-Chemical Characterization Of Solid-State Pharmaceuticals Using Molecular Modeling And Molecular Dynamics"
Personel: Steven Stodghill
Source of funds: overhead account and the Department of Pharmaceutics

"Hyper-DSC Methods For Measuring Glass Transitions Of Polymers Adsorbed To Modified Silicas"
Personel: Steven Stodghill, John O’Haver
Source of funds: overhead account and the Department of Pharmaceutics

“The Use of Microcalorimetry in the study of the adsorption of nonionic surfactants to nonporous fumed silica spheres.”
Personnel: Steven Stodghill
Source of funds: overhead account and the Department of Pharmaceutics

“Measurement of the Thermodynamics of Adsolubilization of Styrene in Admicelles using Microcalorimetry”
Personnel: Steven Stodghill and John O’Haver
Source of funds: overhead account and the Department of Pharmaceutics and the Department of Chemical Engineering

PROFESSIONAL ACTIVITIES

Membership in professional and honor societies:

American Association of Pharmaceutical Scientists (AAPS)
American Association of Colleges of Pharmacy (ACCP)
Rho Chi (Pharmacy Honorary Society)
Phi Lambda Sigma (Pharmacy Leadership Society)
Kappa Psi

Reviewer: Langmuir, Acta Biomaterialia, Thermochemica Acta, Drug Development and Industrial Pharmacy, European Journal of Pharmaceutics and Biopharmaceutics, International Journal of Pharmaceutics, Journal of Pharmacy Teaching

UNIVERSITY SERVICE

Belmont University

Faculty Senate – School of Pharmacy Representative
Chair - Assessment Committee
Admissions Committee
Curriculum Committee
Experiential Education Advisors Committee
Promotion and Tenure Committee
2008 Move-In Day Volunteer

South University

Chair – Curriculum Committee
Chair – School of Pharmacy, Strategic Planning Committee
Chair – Didactic Assessment Subcommittee (subcommittee of the Assessment Committee)
Chair – Curriculum Subcommittee to develop the Integrated Pharmacy Skills Laboratory Sequence
Faculty Advisor – Pharmacy Student Leadership Council
Faculty Advisor – Class of 2009
Student Affairs Council
Faculty Advisory Committee
Admissions Committee
Assessment Committee
Scholastic and Professional Standards Committee

University of Mississippi

Faculty Senate
Faculty Council, School of Pharmacy
Assessment Committee Member, School of Pharmacy
Student/Faculty Relations Committee, School of Pharmacy
Mentor, Summer Research Institute for Undergraduates
Interviewer, 2001 and 2004 Scholars Day
Phi Kappa Tau, Board of Governors
Regional Science Fair Judge 1995-present

AWARDS

2004-2005 Pharmaceutical Sciences Teacher of the Year Award, University of Mississippi

Faculty Research Fellow, Class of 2003, University of Mississippi

1997 Graduate Academic Achievement Award, University of Mississippi

Awarded "Outstanding Presentation" at the 1990 Great Lakes Residency Conference for presentation of "Cost-Benefit Analysis of Hospital Pharmacy and Clinical Pharmacy Residency Programs." **Stodghill SP**, Mosko PJ, Jang R.

REFERENCES

Available upon request.