

Curriculum Vitae: Robert C. Reynolds

Robert C. Reynolds, Ph.D.

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Education:

1985 Ph.D. Organic Chemistry, Duke University, Durham, NC
1977 B.S. Chemistry, University of Virginia, Charlottesville, VA

Professional Experience:

Current Position: Primary Appointment - Research Professor in the Department of Chemistry at the University of Alabama at Birmingham (August 2012 - present). This position involves driving an independent and NIH-funded research program in Medicinal Chemistry within the department. Additionally, and as appropriate, I will support faculty teaching programs, recruiting seminar speakers and mentoring young faculty and students. This position will entail university wide interactions and collaborations, particularly with the medical departments in order to help establish deeper ties between Chemistry and Medicine.

Secondary Appointment - Professor of Medicine, Division of Hematology and Oncology in the UAB Department of Medicine (December, 2013-present).

Recent Research Programs:

- Principal Investigator - Crystallization of the Galactosyltransferase from MTB (R21 AI53813-01): funded date 09/15/02 – 08/31/03.
- Principal Investigator - Glycosyltransferases as Drug Targets in Mycobacteria (R01 AI45317): funded date 09/01/99 – 08/31/03.
- Principal Investigator - Inhibitors of FtsZ Polymerization in Mycobacteria (R01 AI50470): funded date 06/15/02 – 05/31/05.
- Co-Principal Investigator - Novel Selective and Potent Antifolates against AIDS-associated Tuberculosis (R21 AI55344-01A1): funded date 10/01/03-9/30/05
- Project Leader – Preclinical Evaluation of New Antituberculosis Regimens (U19 AI40972): funded date 09/01/96 – 05/31/00.

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- Co-Principal Investigator – Synthesis, characterization of targeted delivery to macrophage receptors and evaluation of anti-tubercular activity of the conjugates of anti-tubercular antibiotics with ligands to macrophage (BTEP #39/ISTC 2174): funded date 01/01/03-12/31/05.
- Co-Principal Investigator – Antifolates against Mycobacterial Infections in AIDS (R01 AI41348): funded date 08/01/97 – 07/31/00. Renewed until 07/31/04.
- Co-Investigator – Synthesis and Bioactivity of New Heterocyclic Compounds from Hydrazides of Aminobenzoic Acids (MC2 - 3007): funded date 09/01/01 – 03/31/03.
- Co-Principal Investigator – Tuberculosis Antimicrobial Acquisition and Coordinating Facility (N01 AI95364): funded date 09/30/94 – 3/31/10.
- Program Leader - Unique Semisynthetic Saponin and Polysaccharide Adjuvants (SRI Project 9526 – Galenica Pharmaceuticals, Inc.): funded date 1/1/97 – 3/01/03.
- Key Personnel – “The Antimicrobial Acquisition and Coordinating Facility” (NIH/NIAID N01-AI-30047 – Murray, P.I.): funded date 9-30-03 - 9-29-2010.
- Principal Investigator – Contract Repository for Antituberculosis Drugs under the Global Alliance for Tuberculosis Drug Development – SRI Project 12259, funded 4/1/07-3/31/11, Total value \$40,000.
- Principal Investigator - Novel Sulindac Sulfide Derivatives for Breast Cancer Chemoprevention – DOD Grant W81XWH-07-1-0463 (SRI Project 12325) funded 6/1/07-5/31/10 (no cost extension – 7/30/11), Total \$653,851.
- Principal Investigator – “Pilot Scale Libraries Based on Nucleoside Templates for the ML Initiative.” - NIH/NIGMS Grant 1 P41 GM086163-01 – funded 9/1/08 to 8/31/11, Total \$1,657,850.
- Principal Investigator – “Targeting MDR Tuberculosis” NIH/NIAID 1RC1AI086677-01 – funding period 09/26/09 – 08/31/11, Total \$1,000,000.
- Co-Principal Investigator/Key Personnel - 1-U54-HG005034 CDP1 (Noah, P.I.) “ATPase profiles in human cells infected with influenza or *M. tuberculosis*” – funded 6/01/10-5/31/12. Effort – 0.6 calendar. NIH, Total \$578,464.
- Research Chemist/Key Personnel - 1 R01CA148817-01 (Piazza, P.I.) “Development of a novel sulindac sulfide amide for colorectal cancer chemoprevention” - funded 8/01/10-7/31/15. Grant has recently moved to the University of South Alabama and I am currently not spending time on this program.
- Co-Principal Investigator/Key Personnel – 1R21AI090467-01 (Hobrath, P.I.) “Design of multi-target D-Ala-D-Ala ligase ligands” – funded 07/01/2010 – 06/30/2013. Effort – 0.6 calendar. NIH/NIAID, Total \$572,982.
- Joint Principal Investigator - "Novel Sulindac Derivatives for Colon Cancer Chemoprevention" – NIH/NCI Grant 1 R01 CA131378-01 (Project 12540) funding date 12/31/07 – 12/30/13, Total \$3,960,054.

Position: served in three roles at Southern Research Institute, Organic Chemistry Department, Drug Discovery Division, Southern Research Institute, Birmingham, AL:

- Director, Drug Discovery Technology (2000 – July 2012)

A newly created directorship at Southern for spearheading innovation in the Drug Discovery Division. This position entailed building and maintaining a modern chemical repository and interfacing strengths in compound preparation and sample

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management (chemical diversity) with capabilities in assay development and high throughput screening. The overarching goal was to create new programs and intellectual property as part of a strategic reinvestment of royalties from the established drug pipeline. There was a strong mentoring component for younger faculty leading to successful grant applications for several scientists early in their careers.

- Manager, Medicinal Chemistry (1994 – July 2012)

This position involved team planning of budgets, capital equipment, future strategy and departmental safety with other Managers, Directors and the VP of Drug Discovery.

- Research Scientist (1994 – July 2012)

Grew and maintained a strong independent research program and helped drive other team-oriented research programs and contracts

Director and Manager Level Administrative Functions:

- Drove and supported new collaborations with universities and companies for acquisition of novel chemical and biological diversity
- Drove and supported new drug discovery research deals with companies and universities for external screening of the Southern chemical repository to grow research portfolio increase intellectual property revenue
- Key role in marketing capabilities of the Drug Development and Discovery Divisions of Southern Research and developing external business opportunities – particularly as they related to establishing agreements with companies for utilizing high throughput screening platform and battery of assays at Southern
- Major role in overall team strategic planning and program development for the division and specifically in the design, implementation and execution of the Drug Discovery Strategic Investment Plan as a member of the Drug Discovery Division leadership team
- Key role in budget planning and preparation for the Medicinal Chemistry Department
- Primary driver in the establishment, maintenance, and oversight of the SRI Chemical Repository and Administrative Director of the high throughput screening facility
- Team driver for safety oversight in the Organic Chemistry Department and direct safety oversight for Medicinal Chemistry Group

Position: Postdoctoral and Research Chemist, Organic and Medicinal Chemistry Department, Southern Research Institute, Birmingham, AL: 1987-1994

Managerial Functions:

- Supervision of research program
- Strategic planning and program development
- Personnel management

Research Functions:

- Development of novel linkers for antisense technology
- Drug development for infectious diseases and cancer

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Position: Postdoctoral Fellow, National Institute of Environmental Health Sciences, Research Triangle Park, NC: 1986-1987

Research Functions:

- Design and synthesis of novel deuterated and fluorinated probes for *in vivo* NMR

Position: Postdoctoral Fellow, Duke University Department of Medicine, Durham, NC: 1985-1986

Research Functions:

- Design and synthesis of novel boronated compounds for boron neutron capture therapy
- Synthesis of radio-iodinated, photoactive calmodulin antagonists

Position: Graduate School Laboratory Research and Teaching Assistant, Duke University Dept. of Chemistry, Durham, NC. Thesis: *The Synthesis and Preliminary Evaluation of Novel Boron-Containing Antifolates*: 1978-1985

Position: Laboratory Technician, University of Virginia, Department of Pharmacology, Charlottesville, VA: 1977-1978

Research Functions:

- Preparation of rat liver mitochondria for the study of gluconeogenesis

Position: Summer Research Fellow, National Bureau of Standards, Gaithersburg, MD: 1973-1979

Research Functions:

- Synthesis of ¹⁵N-labeled carbohydrates for NMR studies
- Annual analysis of medical standards using NMR and Karl Fischer water analysis

Position: National Science Foundation Research Fellow, Department of Agriculture, Dairy Products Division, Washington, DC: 1972

Research Functions:

- Microscale isolation of components in dairy products

Appointments and Review Committees:

Academic Service - University of Alabama at Birmingham, Birmingham, AL

- Adjunct Professor, Chemistry Department, 1996 - 2012.
- Adjunct Professor, Pharmaceutical Design Program, 1996 - 2005.
- Adjunct Associate Scientist, Experimental Therapeutics Program of the Comprehensive Cancer Center, 1996 - present.
- Adjunct Scientist, AIDS Center of the Center for AIDS Research, 1996 - present.
- Member, The University of Alabama Clinical Research Advisory Group, 2001 -

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2007

- Reviewer for the University of Alabama Health Services Foundation General Endowment Fund grants, 2002 - 2007
- Reviewer for the University of Alabama at Birmingham Junior Faculty Development Grants – 2005-2007.
- Adjunct Professor, Pharmacology Department, 2008 – present.
- Ph.D. Thesis Committee for Deborah Mai, Department of Microbiology
- Recent reviewer for small grants for the Alabama Drug Discovery Alliance (Spring 2011)

National Institutes of Health

- Member NIH Review Committee ZRG1-AARR-E, April 2007 – April 2012 as well as numerous *ad hoc* NIH review committees.

Recent NIH Committee Service:

Academic Year 2012

- 2012-10 ZRG1 AARR-E (02) M

Academic Year 2013

- 2013-01 ZAI1 JKB-M (J2) 1
- 2013-01 ZAI1 LG-M (J3) 1
- 2013-05 ZAI1 LR-M (M3) 1
- 2013-10 ZRG1 AARR-E (81) S

Academic Year 2014

- 2014-01 ZAI1 LR-M (J1) 1
- 2014-01 ZRG1 AARR-E (81) S
- 2014-05 ZRG1 AARR-E (81) S
- 2014 Special Emphasis Panel ZAI1 LG-M (M1)

Honors and Awards:

- Reviewer for: *Nucleosides, Nucleotides, and Nucleic Acids*; *The Journal of Organic Chemistry*; *The Journal of Chemical Education*; *Carbohydrate Research*; *Bio-organic and Medicinal Chemistry Letters*; *Bio-organic and Medicinal Chemistry*; *Organic Letters*; *SYNLETT*; *The Journal of Medicinal Chemistry*; *The Journal of Natural Products*; *The Journal of Pharmacy and Pharmacology*; *Antimicrobial Agents and Chemotherapy* and; *The European Journal of Medicinal Chemistry*.

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- Westinghouse Science Talent Search Finalist, 1973
- Graduated with Distinction from the University of Virginia, 1977
- Granted membership into the Alpha Pi chapter of the Phi Lambda Upsilon Chemical Honor Society, 1979

Community Service and Teaching:

Regular Speaker:

“A Day in the Life of a Medicinal Chemist” & “Formulating a Career in Chemistry”

Forum:

- Southern Research Institute - visiting students from home school programs and primary and secondary schools
- Brookwood Forest Elementary School
- Indian Valley Elementary School
- Cherokee Bend Elementary School
- Gresham Middle School
- Rudd Junior High School
- Fairfield High School

Volunteer at the Birmingham Botanical Gardens.

Volunteer during Cherokee Bend Elementary “Groundskeeper Day” March 4, 2000.

Volunteer during Cherokee Bend Elementary “Fall Tree Planting Day” November 4, 2002.

University of Alabama at Birmingham:

- Department of Chemistry, Graduate Course in Advanced Organic Chemistry, Oxidation Chemistry Parts I & II.
- Department of Pharmacology, Graduate Course “Integrative Biomedical Sciences” “Drug Discovery and Development” (May 24, 2000) and “Combinatorial Chemistry” (May 25, 2000).
- Mentor and honors thesis committee member for Heather Williamson (B.S. Degree candidate in the UAB Department of Chemistry) for her thesis program entitled “Effects of Substitution on the Anti-Cancer Activity of NSAIDs under a COX Independent Mechanism” as part of the Chemistry Honors Senior Research Program, Fall 2005.
- Mentor (Summer 2006) for Cierra Spencer (rising sophomore in the UAB Department of Chemistry) during a seven week internship as a Bedsole Scholar through the J. L. Bedsole Foundation. This program is designed to help a college student understand the practical implications of the career path he or she has chosen.
- Presented “Tuberculosis Drug Discovery at Southern Research Institute” on January 11, 2007 to 17 first year UAB graduate students from the Howard Hughes Medical Institute.

Birmingham Southern College, Birmingham, AL:

Lecture on “Modern Drug Discovery” to the Cancer Biology class during January Term on January 17, 2002.

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Mentor for the Birmingham Baccalaureate Program of Shades Valley High School.

- Merry Lynn Mann (Fall 2001)
- Darren Kinnaird (Fall 2001 and Spring 2002)
- Clay Foster (Spring 2002)

Laboratory Research Rotation – Michael Heaven, Department of Pharmacology Graduate Student – Spring, 2008

Reynolds, R.C. “Careers in Organic and Medicinal Chemistry” presented during Career Day to students at the Chippewa Middle School in Port Huron, MI on Thursday, April 28, 2005 from 11:00 – 1:00.

Reynolds, R.C. “A Career in Medicinal Chemistry” presented at the Cherokee Bend Career Day in Birmingham, AL on Thursday, May 18, 2005 from 12:30 – 1:00 pm.

Professional Society Memberships:

American Chemical Society (2014-2016)

American Society of Microbiology (2014-2015)

PUBLICATIONS

- 1) Schwartz, D. P.; **Reynolds, R. C.** Methods for Isolation and Characterization of Natural Products. XIX. Use of a Celite-Sodium Borohydride Column for Reduction of Carbonyl Compounds at the Micro Level. *Microchem. J.* **1975**, *20*, 50-55.
- 2) Coxon, B.; **Reynolds, R. C.** The Synthesis and N.M.R. Spectroscopy of Derivatives of 6-Amino-6-deoxy- D-galactose-6-*N*(15). *Carbohydr. Res.* **1980**, *78*, 1-16.
- 3) Coxon, B.; **Reynolds, R. C.** Synthesis of Nitrogen-15 Labeled Amino Sugar Derivatives by Addition of Phthalimide-*N*(15) to a Carbohydrate Epoxide. *Carbohydr. Res.* **1982**, *119*, 43-54.
- 4) **Reynolds, R. C.**; Trask, T. W.; Sedwick, W. D. 2,4-Dichloro-5-(1-*o*-carboranylmethyl)-6-methylpyrimidine: A Potential Synthons for 5-(1-*o*-Carboranylmethyl)pyrimidines. *J. Org. Chem.* **1991**, *56*, 2391-2395.
- 5) **Reynolds, R. C.**; Crooks, P. A.; Parker, W. B.; Maddry, J. A.; Montgomery, J. A.; Secrist III, J. A. The Synthesis and Antiviral Activity of 5'-Amino-3'-azido-3',5'-dideoxythymidine. *J. Biopharm. Sci.* **1991**, *2*, 195-203.
- 6) Secrist III, J. A.; Crooks, P. A.; Maddry, J. A.; **Reynolds, R. C.**; Rathore, A. S.; Akhtar, M. S.; Montgomery, J. A. Progress Toward the Synthesis of Nonionic Oligonucleotide Analogues with Sulfonate and Sulfonamide Internucleotide Linkages. *Nucleic Acids Res. Symposium Series* **24**, **1991**, 5-8.
- 7) Crooks, P. A.; **Reynolds, R. C.**; Maddry, J. A.; Rathore, A.; Akhtar, M. S.; Montgomery, J. A.; Secrist III, J. A. Nucleoside Sultones: Synthons for the Preparation of Novel Nucleotide Analogs. I. Synthesis and Ring Opening Reactions. *J. Org. Chem.* **1992**, *57*, 2830-2835.

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- 8) **Reynolds, R. C.**; Crooks, P. A.; Maddry, J. A.; Akhtar, M. S.; Montgomery, J. A.; Secrist III, J. A. Synthesis of Thymidine Dimers Containing Internucleoside Sulfonate and Sulfonamide Linkages. *J. Org. Chem.* **1992**, *57*, 2983-2985.
- 9) Comber, R. N.; **Reynolds, R. C.**; Friedrich, J. D.; Manguikian, R.; Buckheit, R.; Truss, J. W.; Secrist III, J. A.; Shannon W. M. 5,5-Disubstituted Hydantoins: Synthesis and Anti-HIV Activity. *J. Med. Chem.* **1992**, *35*, 3567-3572.
- 10) **Reynolds, R. C.**; O'Dell, C. A. A Thin Layer and Column Chromatography Experiment Adapted for Use in Secondary Schools. *J. Chem. Ed.* **1992**, *69*, 989-991.
- 11) Glemarec, C.; **Reynolds, R. C.**; Crooks, P. A.; Maddry, J. A.; Akhtar, M. S.; Montgomery, J. A.; Secrist III, J. A.; Chattopadhyaya, J. Conformational Studies of Thymidine Dimers Containing Sulfonate and Sulfonamide Linkages by NMR Spectroscopy. *Tet.* **1993**, *49*, 2287-2298.
- 12) Maddry, J. A.; **Reynolds, R. C.**; Montgomery, J. A.; Secrist, J. A. III. Carbohydrate Modifications in Antisense Research: Synthesis of Non-Ionic Oligonucleotide Analogs. Cook, P.D. and Sanghvi, Y.S., Eds; *America Chemical Society*. Symposium Series 580, **1994**, 40-51.
- 13) **Reynolds, R. C.**; Comber, R. N. The ABC's of Chromatography. *J. Chem. Ed.*, **1994**, 1075-1077.
- 14) Montgomery, J. A.; Struck, R. F.; Waud, W. R.; Elliott, R. D.; Shealy, Y. F.; **Reynolds, R. C.**; Maddry, J. A. Agents that React with DNA. IN: *Canc. Chemother. Ag.* Foye, W. O., Ed.; ACS Books; Washington, D.C., **1995**, 111-204.
- 15) Kwong, C. D.; Segers, D. P.; **Reynolds, R. C.**; Truss, J. W.; Thomas-Updike, L. D.; Hackley, B. E. Jr. Efforts Directed Toward the Development of a Reactive Topical Skin Protectant Against CEES. *Proc. 1996 Med. Def. Biosci. Rev. Vol. II*, **1996**, 871-881.
- 16) Maddry, J. A.; Suling, W. J.; **Reynolds, R. C.** Glycosyltransferases as targets for inhibition of cell wall synthesis in *M. tuberculosis* and *M. avium*. IN: Solving the Dilemma of Antimycobacterial Chemotherapy. *Res. Microbiol.* **1996**, *147*, 106-112.
- 17) Walker, L.; Kulomaa, M. S.; Bebok, Z.; Parker, W. B.; Allan, P.; Logan, J.; Huang, Z.; **Reynolds, R. C.**; King, S.; Sorscher, E. J. Development of Drug Targeting Based on Recombinant Expression of the Chicken Avidin Gene. *Drug Targeting*, **1996**, *4*, 41-49.
- 18) Renau, T. E.; Gage, J. W.; Dever, J. A.; Roland, G. E.; Joannides, E. T.; Shapiro, M. A.; Sanchez, J. P.; Gracheck, S. J.; Domagala, J. M.; Jacobs, M. R.; **Reynolds, R. C.** Structure-activity relationships of quinolone agents against mycobacteria: effect of structural modifications at the 8 position. *Antimicrob. Ag. Chemother.* **1996**, *40*(10): 2363-8.
- 19) Pathak, A. K.; El-Kattan, Y. A.; Bansal, N.; Maddry, J. A.; **Reynolds, R. C.** Tin(IV) Chloride Mediated Glycosylation in Arabinofuranose, Galactofuranose and Rhamnopyranose. *Tet. Lett.* **1998**, *39*, 1497-1500.
- 20) Maddry, J. A.; Bansal, N.; Bermudez, L. E.; Comber, R. N.; Orme, I. M.; Suling, W. J.; Wilson,

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L. N.; **Reynolds, R. C.** Homologated Aza Analogs of Arabinose as Antimycobacterial Agents. *Bioorg. Med. Chem. Lett.* **1998**, *8*, 237-242.

- 21) Suling, W. J.; **Reynolds, R. C.**; Barrow, E. W.; Wilson, L. N.; Piper, J. R.; Barrow, W. W. Susceptibilities of *Mycobacterium tuberculosis* and *Mycobacterium avium* complex to lipophilic deazapteridine derivatives, inhibitors of dihydrofolate reductase. *J. Antimicrob. Chemother.* **1998**, *42*, 811-815.
- 22) Shoen, C.; Choromanska, O.; **Reynolds, R. C.**; Piper, J. R.; Cynamon, M. *In Vitro* Activities of Several Diamino Methylpyrido Pyrimidines against *Mycobacterium avium* Complex. *Antimicrob. Ag. Chemother.* **1998**, *42*, 3315-3316.
- 23) **Reynolds, R. C.**; Bansal, N.; Rose, J.; Friedrich, J.; Suling, W. J.; Maddry, J. A. Ethambutol-Sugar Hybrids as Potential Inhibitors of Mycobacterial Cell Wall Biosynthesis. *Carbohydr. Res.* **1999**, *317*, 164-179.
- 24) Pathak, A. K.; Maddry, J. A.; Morehouse, C. B.; Besra, G. S.; Suling, W. J.; **Reynolds, R. C.** Studies on β -D-Gal_r(1→4)- α -L-Rha_p-octyl Analogs as Substrates for Mycobacterial Galactosyltransferase Activity. *Bioorg. Med. Chem.* **1999**, *7*, 2407-2413.
- 25) Press, J. B.; **Reynolds, R. C.**, May, R. D.; Marciani, D. J. Structure/Function Relationships of Immunostimulating Saponins. *Studies in Natural Product Chemistry*, **2000**, *24*, 131-174.
- 26) **Reynolds, R. C.**; Tiwari, A.; Harwell, J. E.; Gordon, D. G.; Garrett, B. D.; Gilbert, K. S.; Schmid, S. M.; Waud, W. R.; Struck, R. F. Synthesis and Evaluation of Several New (2-Chloroethyl)nitrosocarbamates as Potential Anticancer Agents. *J. Med. Chem.* **2000**, *43*, 1484-1488.
- 27) White, E. L.; Ross, L. J.; **Reynolds, R. C.**; Seitz, L. E.; Moore, G. D.; Borhani, D. W. Slow Polymerization of *Mycobacterium tuberculosis* FtsZ. *J. Bacteriol.* **2000**, *182*, 4028-4034.
- 28) Marciani, D. J.; Press, J. B.; **Reynolds, R. C.**; Pathak, A. K.; Pathak, V.; Gundy, L. E.; Farmer, J. T.; Koratich, M. S.; May, R. D. Development of Semisynthetic Triterpenoid Saponin Derivatives with Immune Stimulating Activity. *Vaccine* **2000**, *18*, 3141-3151.
- 29) Suling, W. J.; Seitz, L. E.; Pathak, V.; Westbrook, L.; Barrow, E. W.; Zywno-Van-Ginkel, S.; **Reynolds, R. C.**; Piper, J. R.; Barrow, W. W. Antimycobacterial Activities of 2,4-Diamino-5-Deazapteridine Derivatives and Effects on Mycobacterial Dihydrofolate Reductase. *Antimicrob. Ag. Chemother.* **2000**, *44*(10), 2784-2793.
- 30) Pathak, A. K.; Pathak, V.; Bansal, N.; Maddry, J. A.; **Reynolds, R. C.** Synthesis of a Fluorescent Arabinofuranosyl Disaccharide: A Probe for Arabinosyltransferase Activity in *Mycobacterium tuberculosis*. *Tet. Lett.* **2001**, *42*, 979-982.
- 31) Marciani, D. J.; Pathak, A. K.; **Reynolds, R. C.**; Seitz, L. S.; May, R. D. Altered Immunomodulating and Toxicological Properties of Degraded *Quillaja saponaria* Molina Saponins. *International Immunopharmacology*, **2001**, *Vol 1/4*, 813-818.
- 32) **Reynolds, R. C.**; Johnson, C. A.; Piper, J. R.; Sirotnak, F. M. Synthesis and Antitumor Evaluation of the Aminopterin Analogue with the Bicyclo[2.2.2]octane Ring in Place of the

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Benzene Ring. *Eur. J. Med. Chem.* **2001**, 36, 237-42.

- 33) Coxon B, **Reynolds R. C.** Boat conformations synthesis, NMR spectroscopy, and molecular dynamics of methyl 4,6-O-benzylidene-3-deoxy-3-phthalimido- α -D-altropyranoside derivatives. *Carbohydr. Res.* **2001**, 331(4), 461-7.
- 34) Orme, I.; Secrist, J.; Ananthan, S.; Kwong, C.; Maddry, J.; **Reynolds, R.**; Poffenberger, A.; Michael, M.; Miller, L.; Krahenbuhl, J.; Adams, L.; Biswas, A.; Franzblau, S.; Rouse, D.; Winfield, D. Search for new drugs for treatment of tuberculosis: Tuberculosis Drug Screening Program. *Antimicrob Ag. Chemother.* **2001**, 45(7):1943-6.
- 35) Pathak, A. K.; Pathak, V.; Khare, N. K.; Maddry, J. A.; **Reynolds, R. C.** Synthesis of Disaccharides Related to the Mycobacterial Arabinogalactan. *Carbohydr. Lett.* **2001**, 4(2), 117-22
- 36) Pathak, A. K.; Pathak, V.; Seitz, L. E.; Tiwari, K. N.; Akhtar, M. S.; **Reynolds, R. C.** A Facile Method for Deprotection of Trityl Ethers Using Column Chromatography. *Tet. Lett.* **2001**, 42(44), 7755-7757.
- 37) Pathak, A. K.; Pathak, V.; Seitz, L. E.; Maddry, J. A.; Gurcha, S. S.; Besra, G. S.; Suling, W. J.; **Reynolds, R. C.** Studies on (β ,1-5) and (β ,1-6) Linked Octyl Gal₁ Disaccharides as Substrates for Mycobacterial Galactosyltransferase Activity. *Bioorg. Med. Chem.* **2001**, 9(12), 3129-43.
- 38) Pathak, A. K.; Pathak, V.; Maddry, J. A.; Suling, W. J.; Gurcha, S. S.; Besra, G. S.; **Reynolds, R. C.** Studies on α (1-5) Linked Octyl Arabinofuranosyl Disaccharides for Mycobacterial Arabinosyltransferase Activity. *Bioorg. Med. Chem.* **2001**, 9(12), 3145-51.
- 39) Rose, J. D.; Maddry, J. A.; Comber, R. N.; Suling, W. J.; Wilson, L. N.; **Reynolds, R. C.** Synthesis and Biological Evaluation of Potential Inhibitors of Mycobacterial Cell Wall Biosynthesis. I. Trehalose Analogs. *Carbohydr. Res.* **2002**, 337, 105-120.
- 40) Pathak, A. K.; Pathak, V.; Suling, W. J.; Gurcha, S. S.; Morehouse, C. B.; Besra, G. S.; Maddry, J. A.; **Reynolds, R. C.** Studies on n-Octyl-5-(α -D-arabinofuranosyl)- β -D-galactofuranosides for Mycobacterial Glycosyltransferase Activity. *Bioorg. Med. Chem.* **2002**, 10(4), 923-928.
- 41) Kremer, L.; Dover, L. G.; Gurcha, S. S.; Pathak, A. K.; **Reynolds, R. C.**; Besra, G. S. Recent advances in mycobacterial arabinogalactan biosynthesis in the post-genomics era. *Carbohydrate Bioengineering*. Royal Society of Chemistry (**2002**), 178-185.
- 42) White, E. L.; Suling, W. J.; Ross, L. J.; Seitz, L. E.; **Reynolds, R. C.** 2-Alkoxy-carbonylaminopyridines: inhibitors of *Mycobacterium tuberculosis* FtsZ. *J. Antimicrob. Chemother.* **2002** Jul; 50(1):111-4.
- 43) White, E. L.; Ross, L. J.; **Reynolds, R. C.** Biochemistry of *Mycobacterium tuberculosis* FtsZ. *Instituto Jaun March de Estudios e Investigaciones.* **2002**, 146, 23-5.
- 44) Marciani, D.; Pathak, A.; **Reynolds R. C.** Quillaja saponin adjuvants: derivatives formed under

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sub-optimal conditions. *Vaccine*, **2002**, Sep 10; 20(27-28):3237.

- 45) Pathak, A. K.; Pathak, V.; Gurcha S. S.; Besra, G. S.; **Reynolds, R. C.** Synthesis of an arabinofuranosyl disaccharide photoaffinity probe for arabinosyltransferase activity in *Mycobacterium tuberculosis*. *Bioorg. Med. Chem. Lett.* **2002**, 12(19):2749-2752.
- 46) Seitz, L. E.; Suling, W. J.; **Reynolds, R. C.** Synthesis and Antimycobacterial Activity of Pyrazine and Quinoxaline Derivatives. *J. Med. Chem.* **2002**, 45(25):5604-5606.
- 47) Marciani, D. J.; Ptak, R. G.; Voss, T. G.; **Reynolds, R. C.**; Pathak, A. K.; Chamblin, T. L.; Scholl D. R.; May, R. D. Degradation of *Quillaja Saponaria* Molina saponins: Loss of the protective Effects of a herpes simplex virus 1 sub-unit vaccine. *International Immunopharmacology*, **2002**, 2(12), 1703-11.
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- 10) Xin, Y.; Ma, Y.; Brown, R. E.; Scherman, M. S.; Hill, P. J.; Besra, G. S.; Howell, M. D.; Lee, R. E.; Brennan, P. J.; McNeil, M. R.; **Reynolds, R. C.**; Maddry, J. A.; Suling, W. J.; Secrist III, J.

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A.; Weston, A.; Duncan, K.; Mills, J. A. TB Drug Development Targeting Arabinogalactan Biosynthesis. Thirtieth U.S.-Japan Tuberculosis Research Conference, Leprosy Research Conference and Tuberculosis/Leprosy Symposium, July 19-21, 1995, Fort Collins, Colorado.

- 11) Suling, W. J.; Bansal, J.; Bermudez, L. E.; Comber, R. N.; Friedrich, J. A.; Maddry, J. A.; McNeil, M. R.; **Reynolds, R. C.**; Rose, J. D.; Wilson, L. N.; Secrist III, J. A. Design, Synthesis, and Evaluation of Putative Cell Wall inhibitors of *Mycobacterium avium* Complex (MAC). Presented at the 35th ICAAC Annual Meeting, September 17-20, 1995, San Francisco, CA. Abstract No. F19.
- 12) Kwong, C. D.; Segers, D. P.; **Reynolds, R. C.**; Truss, J. W.; Thomas-Updike, L. D.; Hackley, B. E. Jr. Poster presentation: Efforts Directed Toward the Development of a Reactive Topical Skin Protectant against CEES. Presented at the 1996 Medical Defense Bioscience Review, May 12-16 in Baltimore, Maryland.
- 13) **Reynolds, R. C.** Strategies for Targeting Arabinogalactan Synthesis. Invited Speaker for the Colorado State University Annual Meeting of the NCDDG-OI (U-19 AI-38087) Scientific Advisory Panel, December 9, 1996.
- 14) **Reynolds, R. C.**; Tiwari, A.; Harwell, J. E.; Gordon, D. G.; Garrett, B. D.; Gilbert, K. S.; Schmid, S. M.; Waud, W. R.; Struck, R. F.. Synthesis and Evaluation of Several New (2-Chloroethyl)nitrosocarbamates as Potential Anticancer Agents: Presented at the UAB Comprehensive Cancer Center 1997 Annual Research Retreat, October 27, 1997.
- 15) Suling, W. J.; **Reynolds, R. C.**; Barrow, E. W.; Wilson, L. N.; Piper, J. R.; Barrow, W. W. In vitro activity of lipophilic dihydrofolate reductase (DHFR) inhibitors against *Mycobacterium tuberculosis* (MTB) and *Mycobacterium avium* complex (MAC). Abstr. F-42, p. 153. *In: Program and Abstracts of the 37th Interscience Conference on Antimicrobial Agents and Chemotherapy*, October 1997. American Society for Microbiology, Washington, D.C.
- 16) **Reynolds, R. C.** The Tuberculosis Antimicrobial Acquisition and Coordinating Facility: Presented at The University of Notre Dame, December 12, 1997.
- 17) Suling, W. J.; Allen, L. B.; Quenelle, D. C.; Wilson, L. N.; **Reynolds, R. C.** Activity of calmodulin antagonists against *Mycobacterium tuberculosis* in vitro and in vivo. Abstr. F-196. *In: Program and Abstracts of the 38th Interscience Conference on Antimicrobial Agents and Chemotherapy*, 1998. American Society for Microbiology, Washington, D.C.
- 18) **Reynolds, R. C.** Glycosyltransferases as a Drug Target in Mycobacteria: Presented to the Scientific Advisory Board for U19 AI40972 at National Jewish in Denver, Colorado, April 1998.
- 19) **Reynolds, R. C.** The Design and Synthesis of Mycobacterial Glycosyltransferase Inhibitors: Presented at Colorado State University, April 1998 to Dr. Pat Brennan's research group.
- 20) **Reynolds, R. C.** "The Tuberculosis Antimicrobial Acquisition and Coordinating Facility" and "FtsZ as a Target in Mycobacteria" presented at the Center for Biologics of the FDA, April 28, 1998.
- 21) **Reynolds, R. C.** The Tuberculosis Antimicrobial Acquisition and Coordinating Facility: Presented at Boston University, May, 1998.

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- 22) **Reynolds, R. C.** The Tuberculosis Antimicrobial Acquisition and Coordinating Facility: Presented at Wellesley College, May, 1998.
- 23) **Reynolds, R. C.** The Tuberculosis Antimicrobial Acquisition and Coordinating Facility: Presented at The University of Minnesota, Minneapolis, MN, May, 1998.
- 24) **Reynolds, R. C.** Glycosyltransferases as a Drug Target in Mycobacteria: Presented at the Annual Meeting of the National Cooperative Drug Discovery Groups – Opportunistic Infections meeting in Bethesda, MD, July, 1998.
- 25) **Reynolds, R. C.** Annual Progress of The Tuberculosis Antimicrobial Acquisition and Coordinating Facility: Presented at the Annual Meeting of the National Cooperative Drug Discovery Groups – Opportunistic Infections meeting in Bethesda, MD, July, 1998.
- 26) **Reynolds, R. C.** Research in Opportunistic Infections at Southern Research Institute: Presented at the University of Alabama Center for Aids Research Scientific Meeting, August, 1998.
- 27) Pathak, A. S.; Maddy, J. A.; Suling, W. J.; Besra, G. S.; Morehouse, C. B.; **Reynolds, R. C.** Preliminary Structure-Activity Relationships of Disaccharide Templates as Inhibitors of Mycobacterial Glycosyltransferases: Presented at the 216th National Meeting of the American Chemical Society, Boston, MA, August 23-27, 1998.
- 28) **Reynolds, R. C.** Research in Opportunistic Infections at Southern Research Institute: Presented at the University of Alabama Center for Aids Research Annual Retreat, October, 1998.
- 29) Marciani, D. J.; Press, J. B.; **Reynolds, R. C.**; Pathak, A. K.; Pathak, V.; Gundy, L. E.; Farmer, J. T.; Koratich, M. S.; May, R. D. The design, synthesis and preliminary evaluation of novel saponin analogs as vaccine adjuvants: Presented at the UAB Comprehensive Cancer Center Annual Research Retreat, October 19, 1998.
- 30) Suling, W. J.; Allen, L. B.; Quenelle, D. C.; Wilson, L. N.; **Reynolds, R. C.** 1998. Activity of calmodulin antagonists against *Mycobacterium tuberculosis* *in vitro* and *in vivo*, abstr. F-196. *In* Program and abstracts of the 38th Interscience Conference on Antimicrobial Agents and Chemotherapy. American Society for Microbiology, Washington, D.C.
- 31) Marciani, D. J.; Press, J. B.; May, R.; **Reynolds, R. C.**; Pathak, A. K.; Gundy, L. E.; Maxuitenko, Y. Y.; Kraus, L. A.; Koratich, M. S.; Farmer, J. T.; Cook, T. M.; Sherrod, K. M. Novel Semi-synthetic Saponin Analogs Having T-cell Immune Stimulatory Activity as Adjuvants for Cancer Vaccines. Presented at the Cancer Research Institute Meeting, New York, New York, October 4-6, 1999.
- 32) **Reynolds, R. C.** The Tuberculosis Antimicrobial Acquisition and Coordinating Facility: Presented at the IBC conference on *Mycobacterium tuberculosis* at the Ritz Carlton Tysons in McLean, VA, Dec. 10-11, 1998.
- 33) **Reynolds, R. C.** Invited Speaker for the IBC conference on *Mycobacterium tuberculosis*:

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Novel Therapeutic Development at the Ritz Carlton Tysons Corner in McLean, VA Dec. 10-11, 1998: Title: *The cell wall as a drug target.*

- 34) May, R. D.; **Reynolds, R. C.**; Pathak, A. K.; Gundy, L. E.; Maxuitenko, Y. Y.; Kraus, L. A.; Koratich, M. S.; Cook, T. D.; Sherrod, K. M.; Press, J. B.; Marciani, D. J. The Design and Synthesis of Novel Saponin Analogs as Potential Cancer Vaccine Adjuvants and Their Evaluation in an *in vivo* Murine Model. Presented at the American Association of Cancer Research, Philadelphia, PA, 4/12/99. Proc. Amer. Assoc. Cancer Res. 40:311, 1999.
- 35) **Reynolds, R. C.**; May, R. D.; Pathak, A. K.; Gundy, L. E.; Maxuitenko, Y. Y.; Kraus, L. A.; Koratich, M. S.; Cook, T. D.; Sherrod, K. M.; Press, J. B.; Marciani, D. J. The Design and Synthesis of Novel Saponin Analogs as Vaccine Adjuvants and Their Evaluation as Inducers of Th1 and Th2 Activity in an *in vivo* murine model. Presented at AAI in Washington, D.C., 4/19/99, FASEB J. 13:A147, 1999.
- 36) **Reynolds, R. C.** The Cell Wall as a Drug Target: Presented to the NCDDG-OI (U19-AI40972) Advisory Council on Monday May 31, 1999 at the Drake Hotel, Chicago, IL.
- 37) **Reynolds, R. C.**; May, R. D.; Pathak, A. K.; Gundy, L. E.; Maxuitenko, Y. Y.; Kraus, L. A.; Koratich, M. S.; Cook, T. D.; Sherrod, K. M.; Press, J. B.; Marciani, D. J. The Design and Synthesis of Novel Saponin Analogs as Vaccine Adjuvants and Their Evaluation as Inducers of Th1 and Th2 Activity in an *in vivo* murine model: Poster 25 - presented at the Thirty-fourth Tuberculosis-Leprosy Research Conference in San Francisco, CA, June 28, 1999.
- 38) Ananthan, S.; Franzblau, S. G.; Kwong, C. D.; Laughon, B. E.; Maddry, J. A.; Orme, I. M.; Poffenberger, A. C.; **Reynolds, R. C.**; Secrist III, J. A. The Tuberculosis Antimicrobial Acquisition and Coordinating Facility (TAACF): Poster 31 - presented at the Thirty-fourth Tuberculosis-Leprosy Research Conference in San Francisco, CA, June 29, 1999.
- 39) Pathak, A. K.; Maddry, J. A.; Morehouse, C. B.; Besra, G. S.; Suling, W. J.; **Reynolds, R. C.** The Design and Synthesis of Inhibitors of Enzymes in Mycobacterial Cell Wall Elaboration: the Glycosyltransferases: Poster 32 - presented at the Thirty-fourth Tuberculosis-Leprosy Research Conference in San Francisco, CA, June 29, 1999.
- 40) **Reynolds, R. C.**, The Cell Wall as a Drug Target in *M. tuberculosis*: Guest Seminar Speaker at the University of Nebraska, Department of Veterinary Sciences, Lincoln, NE, 9/13/99.
- 41) Suling, W. J.; **Reynolds, R. C.**; Piper, J. R.; Barrow, E. W.; Gundy, L. E.; Van Ginkel, S. Z.; Westbrook, L.; Barrow, W. W. Structure-Activity Studies of 2,4-Diamino-5-Deazapteridine Derivatives as Antimycobacterial Agents and Inhibitors of Mycobacterial Dihydrofolate Reductase (DHFR). Abstract #1812 of the 39th Interscience Conference on Antimicrobial Agents and Chemotherapy, September 26-29, 1999, page 339.
- 42) Heifets L.; McNeil M.; **Reynolds, R. C.**; Welch, J. T.; Cynamon, M. H. Poster: "AI-40972 Preclinical Evaluation of New Antituberculosis Regimens" presented at the Centennial Festschrift Celebration at the National Jewish Medical and Research Center in Denver, CO on October 1, 1999.
- 43) **Reynolds, R. C.**, The Cell Wall as a Drug Target in *M. tuberculosis*: Guest Seminar Speaker at the University of Louisville, Department of Chemistry, Louisville, KY, on 10/22/99.

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- 44) Pathak, A. K.; **Reynolds, R. C.**; Pathak, V.; Gundy, L. E.; May, R. D.; Maxuitenko, Y. Y.; Kraus, L. A.; Koratich, M. S.; Cook, T. D.; Sherrod, K. M.; Press, J. B.; Marciani, D. J. Synthesis of Novel Saponin Analogs as Cancer Vaccine Adjuvants and Studies on the Th1 and Th2 Activity in an *in vivo* Murine Model; Presented at the UAB Comprehensive Cancer Center Annual Research Retreat, October 25, 1999.
- 45) **Reynolds, R. C.**, The Cell Wall as a Drug Target in *M. tuberculosis* and Opportunities in Research at Southern Research Institute: Invited lecturer at DuPont Pharmaceuticals Antimicrobial and Angiogenesis Group, Wilmington, DE, 11/5/99.
- 46) **Reynolds, R. C.** Accomplishments of the TAACF Acquisition Group During the Five-Year Contract Period 9/15/94 to 9/30/99: Presented at the TAACF Contractors Meeting in Bethesda, MD, 11/12/99.
- 47) **Reynolds, R. C.** "Careers in Medicinal Chemistry and a Day in the Life of a Medicinal Chemist" with Chromatography Demonstration & "Careers in Cosmetic Chemistry and a Day in the Life of a Cosmetic Chemist" with Bubble Bath Demonstration at the Gresham Middle School Career Day on January 21, 2000.
- 48) **Reynolds, R. C.** "Careers in Cosmetic Chemistry and a Day in the Life of a Cosmetic Chemist" with Bubble Bath Demonstration on Wednesday, February 2, 2000 at Cherokee Bend Elementary School.
- 49) Pathak, A. K.; **Reynolds, R. C.**; Pathak, V.; Seitz, L. E.; May, R. D.; Maxuitenko, Y. Y.; Koratich, M. S.; Morse, C. B.; Farmer, J. T.; Press, J. B.; Marciani, D. J. Novel Saponin Analogs as Vaccine Adjuvants: Their Design, Synthesis, and Characterization using *in vivo* Murine Models of Th1 and TH2 Activity. Poster presentation #81 on Sunday, March 26th, 2000 at the 219th national meeting of the American Chemical Society in San Francisco, CA.
- 50) Bansal, N.; **Reynolds, R. C.**; Suling, W. S.; Maddry, J. A. Liquid-Phase Combinatorial Synthesis of Arabinose Analogs as Potential Antimycobacterials. Poster presentation #154 on Sunday, March 26th, 2000 at the 219th national meeting of the American Chemical Society in San Francisco, CA.
- 51) Khare, N. K.; Suling, W. S.; **Reynolds, R. C.**; Maddry, J. A. Toward the Synthesis of 4-Thioarabinofuranose Disaccharides as Inhibitors of Mycobacterial Glycosyltransferases. Poster presentation #155 on Sunday, March 26th, 2000 at the 219th national meeting of the American Chemical Society in San Francisco, CA.
- 52) May, R. D.; **Reynolds, R. C.**; Pathak, A. K.; Pathak, V.; Gundy, L. E.; Maxuitenko, Y. Y.; Koratich, M. S.; Farmer, J. T.; Press, J. B.; Marciani, D. J. Semisynthetic triterpenoid saponin derivatives possessing immunostimulating properties that are desirable for cancer vaccines Proc. Amer. Assoc. Cancer Res. 41:875 (2000). Abstracts from the AACR meeting in San Francisco, CA April 1-5, 2000.
- 53) **Reynolds, R. C.** Novel Targets in *Mycobacterium tuberculosis*: FtsZ as a Drug Target. Guest seminar speaker at the Auburn University Veterinary School on April 14, 2000.
- 54) **Reynolds, R. C.** Semi-annual Status Report of the TAACF Acquisition Group from 9/30/99 to

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6/30/00: Presented at the TAACF Contractors Meeting at Colorado State University in Fort Collins, 5/19/00.

- 55) **Reynolds, R. C.** Novel Targets in *Mycobacterium tuberculosis*: FtsZ as a Drug Target. Guest seminar speaker at the University of Kentucky at Louisville, Department of Chemistry on June 7, 2000.
- 56) **Reynolds, R. C.**; White E. L.; Ross, L. J.; Seitz, L. E.; Moore, G. D.; Leung, A. K. W.; Borhani, D. W. Novel Targets in *Mycobacterium tuberculosis*: FtsZ as a Drug Target. Invited speaker at the Thirty-Fifth Research Conference on Tuberculosis and Leprosy of the U.S.-Japan Cooperative Medical Science Program in Yokohama, Japan on July 19, 2000.
- 57) **Reynolds, R. C.**; White E. L.; Ross, L. J.; Seitz, L. E.; Moore, G. D.; Leung, A. K. W.; Borhani, D. W. Novel Targets in *Mycobacterium tuberculosis*: FtsZ as a Drug Target. Visiting Speaker at the Department of Microbiology & Immunology of the University of Newcastle upon Tyne in Newcastle, UK on August 23, 2000.
- 58) **Reynolds, R. C.**; White E. L.; Ross, L. J.; Seitz, L. E.; Moore, G. D.; Leung, A. K. W.; Borhani, D. W. Novel Targets in *Mycobacterium tuberculosis*: FtsZ as a Drug Target. Visiting Speaker at the Center for Biomolecular Studies at the University of Saint Andrews in Fife Scotland, UK on August 28, 2000.
- 59) **Reynolds, R. C.**; White E. L.; Ross, L. J.; Seitz, L. E.; Moore, G. D.; Leung, A. K. W.; Borhani, D. W. Novel Targets in *Mycobacterium tuberculosis*: FtsZ as a Drug Target. Visiting Speaker at the MRC Laboratory of Molecular and Structural Biology in Cambridge, UK on August 30, 2000 – host Dr. Jan Löwe.
- 60) **Reynolds, R. C.**; White E. L.; Ross, L. J.; Seitz, L. E.; Moore, G. D.; Leung, A. K. W.; Borhani, D. W. Novel Targets in *Mycobacterium tuberculosis*: FtsZ as a Drug Target. Visiting Speaker at the Genetique Moleculaire Bacterienne of the Institut Pasteur in Paris, France on September 4, 2000 – host Dr. Stewart Cole.
- 61) **Reynolds, R. C.**; White, L.; Ross, L.; Seitz, L. E.; Moore, G.; Leung, A.; Borhani, D. Poster Session: New Technologies for the Discovery of Antimicrobial Agents (Abstract 2030; Abstracts of the 40th ICAAC Meeting, September 17-20, 2000 in Toronto, Canada, page 226) Inhibitors of Mycobacterial FtsZ Polymerization presented 9/19/00.
- 62) Suling, W. J.; Westbrook, L.; Barrow, E. L. W.; Seitz, L. E.; Pathak, V.; Zxywno-Van-Ginkel, S.; **Reynolds, R. C.**; Piper, J. R.; Barrow, W. W. Poster Session: Novel Antibacterial Agents (Abstract 2183; Abstracts of the 40th ICAAC Meeting, September 17-20, 2000 in Toronto, Canada, page 230) Selective Inhibition of *M. Avium* Dihydrofolate Reductase (DHFR) and Intracellular Efficacy of 2,4-Diamino-5-Deazapteridines presented 9/20/00.
- 63) Suling, W. J.; **Reynolds, R. C.**; Duarte, F.; Barrow, W. W.; Barrow, W. W.; Maddry, J. A. Poster Session: Novel Antibacterial Agents (Abstract 2182; Abstracts of the 40th ICAAC Meeting, September 17-20, 2000 in Toronto, Canada, page 230) Synthesis and Activity of Thio-linked Arabinose Disaccharides against *Mycobacterium tuberculosis* (MTB) and *M. avium* Complex (MAC) presented 9/20/00.
- 64) May, R. D., **Reynolds, R. C.**, Pathak, A. K., Voss, T. G., Koratich, M. S., Farmer, J. T., and

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Marciani, D. M. 2001. Protection against herpes simplex virus-1 in mice following immunization with recombinant HSV-1 glycoprotein D (gD) and a semisynthetic triterpenoid saponin immune stimulant. *FASEB J.* 15:A1190. Presented at Experimental Biology 2001, Orlando, FL March 31-April 4, 2001. Poster no. 943.15

- 65) Pathak, V., Seitz, L. E., Pathak, A. K., Suling, W. J., Maddry, J. A. and **Reynolds, R. C.** Studies on some purine, pyrimidine and pyridine analogs as anti-mycobacterial agents. Presented at the 221st American Chemical Society National Meeting, San Diego, CA, USA (April 1-5, 2001) Abstract # MEDI 271.
- 66) Pathak, A. K., Pathak, V., Seitz, L. E., Bansal, N., Maddry, J. A. and **Reynolds, R. C.** Fluorescent glycofuranosyl disaccharides as probes for arabinosyl- and galactosyl- transferase activity in *Mycobacterium tuberculosis*. Presented at the 221st American Chemical Society National Meeting, San Diego, CA, USA (April 1-5, 2001) Abstract # MEDI 272.
- 67) Seitz, L. E.; Suling, W. J.; **Reynolds, R. C.** Synthesis and Antimycobacterial Activity of Pyrazine and Quinoxaline Derivatives. Presented at the 221st American Chemical Society National Meeting, San Diego, CA, USA (April 1-5, 2001) Abstract # MEDI 273.
- 68) May, R. D.; **Reynolds, R. C.**; Pathak, A. K.; Voss, T. G.; Koratich, M. S.; Farmer, J. T.; Marciani, D. J. Protection Against HSV-1 in Mice Following Immunization with Recombinant HSV-1 Glycoprotein D (gD) and a Semisynthetic Triterpenoid Saponin Adjuvant. Presented at the 14th International Conference on Antiviral Research, Seattle, WA, April 8-12, 2001.
- 69) **Reynolds, R. C.**; White E. L.; Ross, L. J.; Seitz, L. E.; Moore, G. D.; Leung, A. K. W.; Borhani, D. W. Novel Targets in *Mycobacterium tuberculosis*: FtsZ as a Drug Target. Visiting Speaker at the Department of Biochemistry, Vanderbilt University School of Medicine, Nashville, TN on April 30, 2001 – host Dr. Larissa Podust.
- 70) **Reynolds, R. C.** “The Southern Research Repository” at the Quarterly Technology Review Meeting at Southern Research Institute on June 19, 2001.
- 71) **Reynolds, R. C.** “Novel Drug Targets in *Mycobacterium tuberculosis*: Spinoffs from the TAACF” presented at the Gordon Research Conference on Tuberculosis Drug Development on June 26, 2001 at Colby-Sawyer College, New London, NH.
- 72) Ananthan, S.; Franzblau, S. G.; Kwong, C. D.; Laughon, B. E.; Maddry, J. A.; Orme, I. M.; Poffenberger, A. C.; **Reynolds, R. C.**; Secrist III, J. A. The Tuberculosis Antimicrobial Acquisition and Coordinating Facility (TAACF). Poster presentation at the Gordon Research Conference on Tuberculosis Drug Development on June 26, 2001 at Colby-Sawyer College, New London, NH.
- 73) May, R. D.; Triozzi, P. L.; Aldrich, W. A.; **Reynolds, R. C.**; Pathak, A. K.; Marciani, D. J. A Preclinical Cancer Vaccine Study in Mice Using a HER-2 Peptide Immunogen Combined With the Immune Adjuvant GPI-0100 and Pectins: Presented at the UAB Comprehensive Cancer Center Annual Research Retreat, October 22, 2001.
- 74) Suling, W. J.; Westbrook, L.; Barrow, E. L. W.; Zywno-Van-Ginkel, S.; Seitz, L.; Pathak, V.; **Reynolds, R. C.**; Piper, J. R.; Barrow, W. W. Differing Characteristics of *Mycobacterium avium* (MAC) and *M. tuberculosis* (MTB) Dihydrofolate Reductase (DHFR). Abstracts of the

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41st Interscience Conference on Antimicrobial Agents and Chemotherapy, September and December 2001, page 246.

- 75) **Reynolds, R. C.** Lecture on “Modern Drug Discovery” to the Cancer Biology class at Birmingham Southern College, Birmingham, AL on January 17, 2002.
- 76) **Reynolds, R. C.** “Update on the Tuberculosis Antimicrobial Acquisition & Coordinating Facility (TAACF)” presented at the National Center for Natural Products Research at the University of Mississippi, Oxford, Mississippi on Monday, February 11, 2002 – host Dr. Larry Walker.
- 77) **Reynolds, R. C.** “Modern Drug Discovery and Development” presented in the Hendrix ACS Seminar Program at Hendrix College, Conway, Arkansas on Monday, March 4, 2002.
- 78) **Reynolds, R. C.** “The Design and Preparation of New Antitubercular Agents” presented at the Pharmacy School of the University of Kentucky in Lexington, Kentucky on Thursday, March 7, 2002 – host Dr. Peter Crooks.
- 79) **Reynolds, R. C.** “The Design and Preparation of New Antitubercular Agents” presented to the Department of Pharmacy of the University of Tennessee in Memphis, TN on Monday, April 1, 2002 – host Dr. Richard Lee.
- 80) May, R. D.; Triozzi, P. L.; Aldrich, W. A.; **Reynolds, R. C.**; Pathak, A. K.; Marciani, D. J. Preclinical Cancer Vaccine Studies in Mice Using a HER-2 Peptide Immunogen Combined With the Saponin-Based Immune Enhancer GPI-0100 and Polysaccharides. Presented at Experimental Biology 2002 in New Orleans, LA on April 16-24, 2002. Abstract published in the FASEB Journal, volume 16, number 4, March 20, 2002.
- 81) Ananthan, S.; Franzblau, S. G.; Kwong, C. D.; Laughon, B. E.; Maddry, J. A.; Orme, I. M.; Poffenberger, A. C.; **Reynolds, R. C.**; Secrist III, J. A. The Tuberculosis Antimicrobial Acquisition and Coordinating Facility (TAACF). Poster presentation (abstract #163) Fourth World Congress on Tuberculosis on June 4th, 2002 at the Marriot Wardman Park Hotel in Washington, D.C.
- 82) **Reynolds, R. C.** Identifying New Opportunities in Drug Discovery: A New Initiative Between Southern Research Institute and the University of Kentucky. Presented at the University of Kentucky Pharmacy School on June 17th, 2002 in Lexington, KY – host Dr. Peter Crooks.
- 83) Pathak, A. K.; Pathak, V.; Gurcha, S. S.; Besra, G. S.; **Reynolds, R. C.** Disaccharides as Photoaffinity Probes for Arabinosyl- and Galactosyltransferase Activities in *Mycobacterium tuberculosis*. Poster Presentation at the 224th Annual Meeting of the American Chemical Society in Boston, MA on April 20th, 2002. Abstract CARB #67.
- 84) **Reynolds R. C.**; Macaev F.; Rusu G.; Pogrebnoi S.; Shepeli F.; Stingaci E.; Radul O.; Gudima A.; Coban A.; Sterbet I.; Roman R. Preparation and Evaluation of Novel 5-heteryl-2-thio-1,3,4-oxadiazoles Derived from Substituted Benzoic Acids. Poster presentation at the 8th Annual Conference and Exhibition of the Society for Biomolecular Screening in the Hague, the Netherlands from September 22-26, 2002. Abstract #2118, page 169 of conference abstract program.
- 85) **Reynolds, R. C.**; Ananthan, S.; Adams, L.; Biswas, A. N.; Fletcher III, T. M.; Franzblau, S. G.;

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Guthrie, T. L.; Krahenbuhl, J.; Kwong, C. D.; Laughon, B. E.; Lenaerts, A.; Maddry, J. A.; Michael, M.; Orme, I. M.; Poffenberger, A. C.; Secrist III, J. A.; Suling, W. J. NIH-NIAID Tuberculosis Antimicrobial Acquisition and Coordinating Facility (TAACF) Program: High Throughput Primary and Target-based *Mycobacterium tuberculosis* Screening. Poster presentation at the 8th Annual Conference and Exhibition of the Society for Biomolecular Screening in the Hague, the Netherlands from September 22-26, 2002. Abstract #2527 on page 214 of conference abstract program.

- 86) Bermudez, L. E.; Kolonoski, P.; **Reynolds, R. C.**; Inderleid, C. B.; Young, L. S. Identification of a Thiosemicarbazide (Thiacetazone-like) Compound with Activity Against *Mycobacterium avium* (MAC) in Mice. Poster presentation at the 42nd ICAAC Meeting of the American Society for Microbiology, September 27-30, 2002, San Diego, CA, Abstract B-513, page 38.
- 87) **Reynolds R. C.** The Design and Preparation of Novel Inhibitors of Mycobacterial Cell Wall Synthesis: Mycobacterial Glycosyltransferases as Drug Targets & Semisynthetic Saponin Adjuvants. Presented at the Ole Miss Natural Products Center on November 8, 2002 in Oxford, MS – host Dr. Larry Walker.
- 88) **Reynolds R. C.** The Design and Preparation of New Drugs Against *Mycobacterium tuberculosis*. Presented at the Department of Molecular Genetics and Microbiology of the University of New Mexico Health Sciences Center, the University of New Mexico on January 23rd, 2003 – host Dr. Vojo Deretic..
- 89) White, E. L.; Ross, L. J.; Borhani, D. W.; **Reynolds, R. C.** FtsZ, An Essential Bacterial Division Protein [Poster 154 (page 66, abstract booklet)] presented at the Keystone Symposium “Tuberculosis: Integrating Host and Pathogen Biology” on Sunday, January 26th, 2003 in Taos, NM.
- 90) **Reynolds, R. C.** “DHFR Inhibitors” at the TB Structural Biology Consortium Retreat in Santa Fe, NM on September 8, 2003 – host Dr. Tom Terwilliger.
- 91) **Reynolds, R. C.** “The Design and Preparation of New Drugs Against *Mycobacterium tuberculosis*: FtsZ as a Drug Target” presented to the Structural Biology Group in the Department of Biochemistry at Texas A&M University on November 4, 2003 – host Dr. Jim Sacchettini.
- 92) **Reynolds, R. C.** “The Design and Preparation of New Drugs against *Mycobacterium tuberculosis*: FtsZ as a Drug Target” presented to the Department of Chemistry of the University of Alabama at Birmingham December 4, 2003.
- 93) **Reynolds, R. C.** “The Design and Preparation of New Drugs against *Mycobacterium tuberculosis*: FtsZ as a Drug Target” presented to the Department of Chemistry of the University of South Alabama on January 16, 2004 (host Dr. Michael Boyd).
- 94) **Reynolds, R. C.** “The Application of Screening Libraries to Biodefense” presented at the Infocast conference The State of the Art in Biodefense Vaccines and Therapeutics on Tuesday, April 4, 2004 in Washington, D.C.
- 95) **Reynolds, R. C.** “The Design and Synthesis of Novel Antitubercular Agents.” presented to the Department of Chemistry of the University of Alabama at Birmingham May 13, 2004.

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- 96) **Reynolds, R. C.** “The Tuberculosis Antimicrobial Acquisition and Coordinating Facility” presented at the NIAID Invited Investigators Meeting – Synergies for Translational Science in Mycobacterial Diseases from June 8-10, 2004 at the Greenbelt Marriott Hotel, Greenbelt, MD.
- 97) Dushkin, M. I.; Schwartz, Y. S.; Vavilin, V. A.; Melnikova, E. V.; Khoschenko, O. M.; Kashtanova, E. V.; Sennikov, S. V.; Kozlov, V. A.; Agafonov, A. P.; Alekseev, A. Y.; Rassadkin, Y. N.; Shestapalov, A. M.; Ivankina, T. Y.; Saraev, D. V.; Azaev, M. S.; Freidin, M. B.; Rud'ko, A. V.; Puzirev, V. P.; Kurunov, Y. N.; Svistelnik, A. V.; Krasnov, V. A.; **Reynolds, R. C.**; Morris, S. L.; Blinov, V. M. Title: “*Targeted delivery of anti-tubercular antibiotics to macrophages infected by Mycobacterium tuberculosis*” presented at the International Conference devoted to the 30th Anniversary of Vector, Novosibirsk on August 4, 2004.
- 98) **Reynolds R. C.** and Harris D. “Southern Research Institute: Background and Capabilities” presented to Dr. Stanislaw Pikul of Avalon Pharmaceuticals at the Global Pharma R&D Summit in Scottsdale, AZ on Tuesday, September 14, 2004 at 10:00 a.m.
- 99) **Reynolds R. C.** and Harris D. “Southern Research Institute: Background and Capabilities” presented to Dr. John Gillard of Aegera Therapeutics, Inc. Pharmaceuticals at the Global Pharma R&D Summit in Scottsdale, AZ on Tuesday, September 14, 2004 at 10:55 a.m.
- 100) **Reynolds R. C.** and Harris D. “Southern Research Institute: Background and Capabilities” presented to Dr. Ed Jaeger of Johnson & Johnson at the Global Pharma R&D Summit in Scottsdale, AZ on Tuesday, September 14, 2004 at 1:00 p.m.
- 101) **Reynolds R. C.** and Harris D. “Southern Research Institute: Background and Capabilities” presented to Dr. Christof Angst of AstraZeneca at the Global Pharma R&D Summit in Scottsdale, AZ on Tuesday, September 14, 2004 at 1:55 p.m.
- 102) **Reynolds R. C.** and Harris D. “Southern Research Institute: Background and Capabilities” presented to Dr. Jon Rosen of Ligand Pharmaceuticals at the Global Pharma R&D Summit in Scottsdale, AZ on Tuesday, September 14, 2004 at 3:00 p.m.
- 103) **Reynolds R. C.** and Harris D. “Southern Research Institute: Background and Capabilities” presented to Mr. Martin LeBlanc of Caprion Pharmaceuticals, Inc. at the Global Pharma R&D Summit in Scottsdale, AZ on Wednesday, September 15, 2004 at 8:55 a.m.
- 104) **Reynolds R. C.** and Harris D. “Southern Research Institute: Background and Capabilities” presented to Dr. Deborah Phippard of Roche Pharmaceuticals at the Global Pharma R&D Summit in Scottsdale, AZ on Wednesday, September 15, 2004 at 10:00 a.m.
- 105) Suling, W. J., Seitz, L. E., **Reynolds, R. C.**, Barrow, W. W. Poster F-733: “Synergism of a new *Mycobacterium avium* dihydrofolate reductase inhibitor in combination with dihydropteroate synthase inhibitors.” Presented at the 44th Interscience Conference on Antimicrobial Agents and Chemotherapy, American Society for Microbiology on Sunday October 31, 2004 Poster Session 73: “Novel and Diverse Antibacterial Agents and Strategies.”
- 106) Barrow, E. W., Suling, W. J., Seitz, L. E., **Reynolds, R. C.**, Barrow, W. W. Poster F-734: “Screening of new selective inhibitors for *Mycobacterium avium* DHFR.” Presented at the 44th Interscience Conference on Antimicrobial Agents and Chemotherapy, American Society for

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Microbiology on Sunday October 31, 2004 Poster Session 73: "Novel and Diverse Antibacterial Agents and Strategies."

- 107) Piazza, G., and **Reynolds, R. C.** Novel Sulindac Analogs as Chemopreventive and Therapeutic Agents for the Treatment of Cancer presented to R. Scott Pyron, Director, Business Development of Research Corporation Technologies on 12/15/04.
- 108) Harris, D.; White, E. L.; **Reynolds, R. C.** "Southern Research Institute, Capabilities and Services & The Nitrox Project, Current Screening Project and Follow-up Project" on January 11, 2005.
- 109) **Reynolds, R. C.** "Drug Discovery for TB Chemotherapy" presented at the UAB TB Mini-symposium at the University of Alabama at Birmingham on Thursday April 14, 2005 at 2:15-3:00 pm.
- 110) Piazza, G. A.; Able, C.; Ross, L. J.; Payne, P.; Maxuitenko, Y.; May, R.; White, E. L.; and **Reynolds, R. C.** April 17, 2005. Correlation between colon tumor cell growth inhibition and phosphodiesterase inhibition among specific chemical classes of NSAIDs and COX-2 inhibitors. 96th Annual American Association of Cancer Research Meeting, Anaheim, CA . Citation in Proc. Amer. Assoc. Cancer Res. 2005;46:743.
- 111) **Reynolds, R. C.** "The Design and Preparation of New Anti-tubercular Agents" presented to the Pharmaceutical Chemistry Course at Michigan State University in Lansing, MI on Wednesday, April 27, 2005 at 3:00 pm.
- 112) **Reynolds, R. C.**; Harris, D. "Southern Research Institute a Not-For-Profit Drug Discovery Engine" presented at the University of Alabama at Huntsville and the investor group from Hudson Alpha Biotech Research Institute on September 9, 2005 in Huntsville, AL.
- 113) **Reynolds, R. C.** "The Design and Preparation of New Anti-tubercular Agents" presented at the University of Alabama at Huntsville on September 9, 2005 in Huntsville, AL – host Dr. Ed Meehan.
- 114) **Reynolds, R. C.**; Harris, D. "The Capabilities of Southern Research Institute and potential Interactions with the University of Mississippi presented at the National Center for Natural products Research in the School of Pharmacy at the University of Mississippi on September 14, 2005 in Oxford, MS – host Dr. Larry Walker.
- 115) Ananthan, S.; Maddry, J. A.; **Reynolds, R. C.**; Secrist III, J. A. The CCRB TB Program Review of the TAACF Contract. Special presentation to Dr. Richard Whitley on October 3, 2005 at the NIAID in Bethesda, MD.
- 116) Ananthan, S.; Maddry, J. A.; **Reynolds, R. C.**; Secrist III, J. A. The CCRB TB Program Review of the TAACF Contract. Presentation to the assembled CCRB panel on October 4, 2005 at the Doubletree Hotel & Executive Meeting Center in Rockville, MD.
- 117) **Reynolds, R. C.** Invited Speaker "Drug Discovery for TB Chemotherapy" presented at the Southeastern Mycobacteria Meeting at the University of Alabama at Birmingham Saturday, October 22, 2005.

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- 118) Ananthan, S.; Franzblau, S. G.; Kwong, C. D.; Laughon, B. E.; Maddry, J. A.; Orme, I. M.; Poffenberger, A. C.; **Reynolds, R. C.**; Secrist III, J. A.; Krahenbuhl, J.; Adams, L.; Biswas, A.; Faaleolea, E.; Fletcher, T.; Guie, M.-A. ; Lenaerts, A.; White, E. L. The Tuberculosis Antimicrobial Acquisition and Coordinating Facility (TAACF): Poster presentation at Southeastern Mycobacteria Meeting at the University of Alabama at Birmingham Saturday, October 22, 2005.
- 119) **Reynolds, R. C.** “Anti-tubercular Drug Design and Preparation” presented to the Chemistry Department at East Carolina University in Greenville, NC on November 3, 2005.
- 120) Piazza G. A.; **Reynolds, R. C.** “The MLSCN Roadmap Initiative” presented at Roche Pharmaceuticals on March 8, 2006 (host Dr. Ralph Garippa)
- 121) Piazza G. A.; **Reynolds, R. C.** “Anti-neoplastic Properties of NSAID Derivatives” presented at Roche Pharmaceuticals on March 8, 2006 (host Dr. Ralph Garippa)
- 122) **Reynolds, R. C.** presented by invitation of Dr. Christopher Lipinski “Better Living Through Chemical Diversity: Compound Management at a Not-for-Profit Research Institute - Maximizing Productivity with Limited Resources.” at the 9th MIPTEC Conference: Thursday May 11, 2006 at the Congress Center in Basel, Switzerland.
- 123) Harris, D. W.; Cui, M.; Gorman, G.; **Reynolds, R. C.** presented “An Update on Southern Research Institute Research Programs and Opportunities for Collaboration” to the National Center for Natural Products Research of the University of Mississippi on June 13, 2006 – host Dr. Larry Walker.
- 124) **Reynolds, R. C.** presented “Anti-tubercular and FtsZ Polymerization Activity of Ole Miss Natural Products” to the National Center for Natural Products Research of the University of Mississippi on June 13, 2006 – host Dr. Larry Walker.
- 125) Harris, D. W.; Cui, M.; Gorman, G.; **Reynolds, R. C.** presented “Collaborations for Research & Drug Discovery” to the St. Jude Children’s Research Hospital on June 14, 2006 (Host Dr. Kip Guy)
- 126) **Reynolds, R. C.** presented “FtsZ as a Drug Target in Tuberculosis” to the St. Jude Children’s Research Hospital on June 14, 2006 (Host Dr. Kip Guy)
- 127) Harris, D. W.; **Reynolds, R. C.** presented “Collaborations for Research & Drug Discovery” to Cytokinetics Inc. on June 21, 2006 (host Dr. Cynthia Adams)
- 128) **Reynolds, R. C.** presented “FtsZ as a Drug Target in Tuberculosis” to Cytokinetics Inc. on June 21, 2006 (host Dr. Cynthia Adams)
- 129) Piazza G. A. and **Reynolds, R. C.** “Anti-neoplastic Properties of NSAID Derivatives” presented at the UAB Breast SPORE Executive Committee Meeting, August 7, 2006 (host Dr. Al LoBuglio)
- 130) Harris D. W.; Piazza G. A. and **Reynolds, R. C.** presented to the UAB Department of Microbiology and Immunology “Collaborations for Research & Drug Discovery” on September 6, 2006 (host Dr. Peter Burrows)

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- 131) Harris D. W.; Piazza G. A. and **Reynolds, R. C.** presented through the UAB Experimental Therapeutics Seminar Series in the Division of Hematology and Oncology "Collaborations for Research & Drug Discovery" on November 6, 2006 (hosts Drs. Denise Shaw and Michael Rupert)
- 132) **Reynolds, R. C.** presented to the Department of Chemistry at the University of Alabama at Tuscaloosa "Glycosyltransferases as Drug Targets in Mycobacteria" on November 9, 2006 (host Dr. Michael Jennings)
- 133) Harris D. W.; Piazza G. A. and **Reynolds, R. C.** presented to the Dept. of Chemistry – Green Chemistry Group at the University of Alabama at Tuscaloosa "Collaborations for Research & Drug Discovery" on November 9, 2006 (host Dr. Anthony Arduengo)
- 134) Harris D. W.; **Reynolds, R. C.** presented to Lilly "Collaborations for Research & Drug Discovery" on November 29, 2006 (host Dr. Ruth Kramer)
- 135) Harris D. W.; **Reynolds, R. C.** presented to the Department of Biochemistry at Purdue University "Collaborations for Research & Drug Discovery" on November 30, 2006 (host Dr. Victor Rodwell)
- 136) Alahari, A.; Dover, L.; **Reynolds, R. C.**; Besra, G.; Kremer, L. poster presentation "Cell Wall Mycolic Acids as Targets of Thioamide-containing Drugs" during the International Symposium on New Frontiers in Tuberculosis Research in New Delhi, India from December 4-6, 2006
- 137) Keeton, A. B.; Thaiparambil, J. T.; Gary, B. D.; White, E. L.; Rasmussen, L.; **Reynolds, R. C.**; Piazza, G. A. poster presentation "Reversal of MRP-1 mediated multi-drug resistance by sulindac sulfide and indomethacin." In: American Association for Cancer Research Annual Meeting: Proceedings; 2007 Apr 14-18; Los Angeles, CA. Philadelphia (PA): AACR; 2007. Abstract 2282
- 138) Thaiparambil, J. T.; Gary, B. D.; Keeton, A. B.; Maxuitenko, Y.; Gorman, G.; Coward, L.; **Reynolds, R.**; Piazza, G. A. poster presentation "Sulindac sulfide selectively inhibits cGMP PDE from human HT-29 colon tumor cells." In: American Association for Cancer Research Annual Meeting: Proceedings; 2007 Apr 14-18; Los Angeles, CA. Philadelphia (PA): AACR; 2007. Abstract 644
- 139) **Reynolds, R. C.** "Antituberculosis Drug Discovery: FtsZ as a Drug Target" presented to the Department of Biomedical Research at the University of Texas Health Center @ Tyler in Tyler, Texas on May 2, 2007 (host Dr. Malini Rajagopalan)
- 140) **Reynolds, R. C.** "Aspirin: The Ultimate Chemical Probe" presented at the Molecular Libraries Screening Centers Network (MLSCN) Annual Steering Committee Meeting on July 16, 2007 at the Omni Shoreham Hotel in Washington, D.C.
- 141) **Reynolds, R. C.**; Srivastava, S.; Mathew, B.; Jacob, K.; Seitz, L.; Pathak, V.; Rajagopalan, M.; Lofton, H.; Ross, L.; White, E. L.; Suling, W. "FtsZ: The Search for New Inhibitor Scaffolds" - poster presentation at the Tuberculosis Drug Development Gordon Research Conference, on August 27 and 28, 2007 in Oxford, UK.

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- 142) Alahari, A.; Dover, L.; Besra, G.; Guarardel, Y.; Trivelli, X.; Sacchettini, J. C.; **Reynolds, R.**; Coxon, G.; Kremer, L. "Thiacetazone Inhibits Cyclopropanation of Cell Wall Mycolic Acids" - poster presentation at the Tuberculosis Drug Development Gordon Research Conference, on August 27 and 28, 2007 in Oxford, UK.
- 143) **Reynolds, R. C.** "FtsZ: The Search for Alternative Inhibitor Scaffolds" presented to the Institute for Tuberculosis Research of the University of Chicago on September 20, 2007 (host Dr. Scott Franzblau).
- 144) **Reynolds, R. C.** "FtsZ: The Search for Alternative Inhibitor Scaffolds" presented to the Center for Tuberculosis Research of Johns Hopkins University on September 24, 2007 (host Dr. William Bishai)
- 145) **Reynolds, R. C.** "FtsZ: The Search for Alternative Inhibitor Scaffolds" presented at the UAMS Winthrop P. Rockefeller Cancer Institute in Little Rock, Arkansas on October 11, 2007 (host Dr. Peter Emanuel)
- 146) Hobrath, J.; **Reynolds, R. C.** "Potential ATP-binding Targets in Bacteria for Fragment-based Drug Discovery" presented to Dr. Ed Meehan and the fragment-based drug discovery group from the University of Alabama at Huntsville on 12/06/07 at Southern Research Institute in Birmingham, AL.
- 147) **Reynolds, R. C.** "Aspirin, the Ultimate Chemical Probe: NSAIDS and Cancer." presented at the UAMS Winthrop P. Rockefeller Cancer Institute in Little Rock, Arkansas on February 27, 2008 (host Dr. Peter Emanuel)
- 148) Secrist, J. A. III; Maddry, J. A.; **Reynolds, R. C.** "The Tuberculosis Antimicrobial Acquisition and Coordinating Facility" presented to the DMID project team during the **TB Drug Discovery Programs: Review and Prioritizations Meeting** at DMID in Rockville, MD of March 13, 2008 (host Dr. Robert Goldman).
- 149) **Reynolds, R. C.** "FtsZ: The Search for New Inhibitor Scaffolds" presented to the Departments of Medicinal Chemistry and Pharmaceuticals and Translational Research on March 19, 2008 (host Dr. Chris Ireland).
- 150) Tinsley, H. N.; Gary, B. D.; Keeton, A. B.; **Reynolds, R. C.**; Piazza, G. A. SRI 21009: A novel non-cyclooxygenase inhibitory derivative of sulindac that potently and selectively inhibits the growth and induces apoptosis of human breast tumor cells [abstract]. In: Proceedings of the 99th Annual Meeting of the American Association for Cancer Research; 2008 Apr 12-16; San Diego, CA. Philadelphia (PA): AACR; 2008. Abstract # 476.
- 151) Piazza, G. A.; Keeton, A. B.; Gary, B. D.; Thaiparambil, J. T.; Tinsley, H. N.; Mathew, B.; Gilbert, K.; Coward, L.; Roy, A.; Qu, Z.; Gorman, G.; Maxuitenko, Y.; **Reynolds, R. C.** SRI 21009: A novel sulindac derivative that potently inhibits colon tumor cell growth without inhibiting cyclooxygenases [abstract]. In: Proceedings of the 99th Annual Meeting of the American Association for Cancer Research; 2008 Apr 12-16; San Diego, CA. Philadelphia (PA): AACR; 2008. Abstract # 2115.
- 152) White, E. L.; Suling, W.; Ananthan, S.; Rasmussen, L.; Secrist, J. A. III; and **Reynolds,**

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R. C. Antituberculosis High Throughput Drug Screening at Southern Research Institute, presented at the Annual Meeting of the Society for Biomolecular Screening, April 6-10, 2008 in St. Louis, MO; Poster Abstract # P14007.

- 153) **Reynolds, R. C.**; Mathew, B.; Tinsley, H. N.; Gary, B. D.; Keeton, A. B.; Hobrath, J. V.; Piazza, G. A.. Novel Sulindac Sulfide Derivatives for Breast Cancer Chemoprevention – Breast Cancer Idea Award Contract W81XWH-07-1-0463 presented at the Era of Hope Department of Defense Breast Cancer Research Program on June 24-28, 2008 in Baltimore, MD, Poster session: Risk and Prevention, Thursday, June 26th, Poster Abstract P14-8.
- 154) **Reynolds, R. C.** “Anti-tubercular Drug Discovery: Glycosyltransferases as Drug Targets” presented to the Institute for Tuberculosis Research of the University of Chicago on July 10, 2008 (Host Dr. Scott Franzblau).
- 155) Piazza, G. A.; **Reynolds, R. C.** "Cyclooxygenase-independent properties of sulindac: new drug candidates for chemoprevention and multidrug resistance" presented at the Mayo Clinic, Rochester, Mn 7/12/08 (Host Dr. Robert Diasio)
- 156) Piazza, G. A.; **Reynolds, R. C.** "Cyclooxygenase-independent properties of sulindac: new drug candidates for chemoprevention and multidrug resistance" presented at the Hormel Institute, Austin, MN – 7/12/08 (Host Dr. Junxuan Lu)
- 157) **Reynolds, R. C.** Update on the D-Ala:D-Ala ligase project to the Meehan Structural Biology Group at the University of Alabama, Huntsville on September 19, 2008 (Host Dr. Ed Meehan)
- 158) **Reynolds, R. C.** Update on the D-Ala:D-Ala ligase project to Nathanael Gray, Priscilla Yang and Eric Rubin at the Harvard University School of Public Health on October 20, 2008 (guest of Dr. Gray)
- 159) Knight, M. R.; Tinsley, H. N.; Whitt, J. D.; Gary B D, Keeton, A. B.; **Reynolds, R. C.**; Piazza, G. A. In vitro combination benefits of epidermal growth factor receptor inhibitors and SRI 21009, a novel sulindac derivative that lacks cyclooxygenase inhibitory activity, for human breast cancer [abstract]. In: Proceedings of the 100th Annual Meeting of the American Association for Cancer Research; 2009 Apr 18-22; Denver, CO. Philadelphia (PA): AACR; 2009. Abstract no. 1736.
- 160) Piazza, G. A.; Keeton, A. B.; Gary, B. D.; Tinsley, H. N.; Whitt, J. D.; Knight, M. R.; Mathew, B.; Coward, L.; Gorman, G.; Li, Y.; Hobrath, J. V.; Maxuitenko, Y. Y.; **Reynolds, R. C.** In vivo inhibition of colon tumor cell growth in the HT-29 xenograft model by SRI 21009: A novel sulindac derivative that potently induces apoptosis but does not inhibit cyclooxygenases [abstract]. In: Proceedings of the 100th Annual Meeting of the American Association for Cancer Research; 2009 Apr 18-22; Denver, CO. Philadelphia (PA): AACR; 2009. Abstract no. 2986.
- 161) Zhang, Y.; Zhang, J.; Wang, L.; Quealy, E.; Gary, B. D.; **Reynolds, R. C.**; Piazza, G. A.; Lu, J. Prostate cancer chemopreventive efficacy and mechanisms of a novel sulindac derivative [abstract]. In: Proceedings of the 100th Annual Meeting of the American Association for Cancer Research; 2009 Apr 18-22; Denver, CO. Philadelphia (PA): AACR; 2009. Abstract no. 953.

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- 162) Tinsley, H. N.; Gary, B. D.; Keeton, A. B.; **Reynolds, R. C.**; Piazza, G. A. Sulindac sulfide inhibits growth and induces apoptosis of human HT-29 colon cancer cells through inhibition of PDE5A [abstract]. In: Proceedings of the 100th Annual Meeting of the American Association for Cancer Research; 2009 Apr 18-22; Denver, CO. Philadelphia (PA): AACR; 2009. Abstract no. 26.
- 163) **Reynolds, R. C.** "Antituberculosis Drug Discovery: FtsZ as a Drug Target" presented to the Department of Microbiology, Immunology and Pathology, Colorado State University on April 23, 2009 (Host Dr. Anne Lenaerts)
- 164) **Reynolds, R. C.** "High Throughput Screening and Chemical Genomics for New Drug Discovery against Mtb" presented at the NIAID Mycobacterial "omics" meeting in Sterling, VA on July 22, 2009 (Host Dr. Christine Sizemore)
- 165) **Reynolds, R. C.** "Tuberculosis Drug Discovery at Southern Research Institute" presented to the Department of Pharmacological Sciences of the Harrison School of Pharmacy, Auburn University on September 1, 2009 (Host Dr. Angela Calderon)
- 166) **Reynolds, R. C.** Invited lecture "High Throughput Screening for Inhibitors of Mtb" presented at the Gordon Research Conference on Tuberculosis Drug Discovery at Magdalene College in Oxford, UK on September 18, 2009 (Session Chair – Dr. Stewart Cole)
- 167) Alahari, A.; Alibaud, L.; Trivelli, X.; Gupta, R.; Bishai, W. R.; Lamichhane, G.; **Reynolds, R. C.**; Guerardel, Y.; Coxon, G.; Kremer, L. Mycolic acid methyltransferase, MmaA4, is necessary for thiacetazone susceptibility in *Mycobacterium tuberculosis*. Poster presentation at the Gordon Research Conference on Tuberculosis Drug Discovery at Magdalene College in Oxford, UK on September 17-18, 2009.
- 168) **Reynolds, R. C.** "Cheminformatic Analysis of HTS Screening Results" presented at the NIAID TAACF Contract Review meeting in Bethesda, MD on September 23, 2009 (Host Dr. Robert Goldman)
- 169) **Reynolds, R. C.** "Antituberculosis Drug Discovery: FtsZ as a Drug Target" presented to the group of Dr. Harold Erickson in the Department of Cellular Biology, Duke University on September 28, 2009 (Host Dr. Harold Erickson)
- 170) **Reynolds, R. C.** "Tuberculosis Drug Discovery at Southern Research Institute" presented to the Department of Chemistry, Duke University on September 29, 2009 (Host Dr. Barbara Ramsay Shaw)
- 171) Grimaldi, M.; White, M.; **Reynolds, R.**; Piazza, G. Poster presentation "Analysis of NSAIDs as Gliotoxic Compounds" at the Neuroscience meeting in Chicago, IL on October 17-21, 2009
- 172) Tinsley, H. N.; Gary, B. D.; Keeton, A. B.; Zhang, W.; Abadi, A. F.; **Reynolds, R. C.**; Piazza, G. A.; Poster presentation "Sulindac sulfide selectively inhibits growth and induces apoptosis of human breast tumor cells by PDE5 inhibition, elevation of cGMP, and activation of PKG;" UAB Comprehensive Cancer Center Research Retreat, Wednesday, October 28, 2009

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- 173) **Reynolds, R. C.** Invited lecture “High Throughput Screening for Inhibitors of Mtb” presented at to the Department of Microbiology at Colorado State University on Thursday, November 5, 2009 (Hosts Drs. Ian Orme and Anne Lenaerts)
- 174) **Reynolds, R.C.** “Targeting the Mycobacterial ATPome” presented at the Third Southeastern Mycobacterial Meeting in Chapel Hill, NC on Saturday, January 16th, 2010 (Host Dr. Miriam Braunstein).
- 175) **Reynolds, R.C.** “Targeting the Mycobacterial ATPome” presented at the The Hudson Alpha Institute for Biotechnology in Huntsville, AL on April 5th, 2010 (Host Dr. Chris Gunter).
- 176) **Reynolds, R.C.** “Targeting the Mycobacterial ATPome and the Southern Research Pilot Scale Library Grant” presented to the Department of Chemistry at the University of Alabama at Tuscaloosa on 4/15/10 (Host Dr. Kevin Shaughnessy)
- 177) **Reynolds, R.C.** “Targeting the Mycobacterial ATPome” presented at Vertex Pharmaceuticals in Boston, MA on 6/24/10 (Host Dr. Christopher Locher).
- 178) **Reynolds, R.C.** “Targeting the Mycobacterial ATPome” presented to the Institute for Tuberculosis Research of the University of Chicago on July 7, 2010 (Host Dr. Scott Franzblau).
- 179) **Reynolds, R.C.** “Targeting the Mycobacterial ATPome” presented to Department of Molecular and Cellular Pharmacology at the University of Miami in Miami, FL on 7/15/10 (Host Dr. Stephan Schürer).
- 180) **Reynolds, R.C.** & Harris, D. “Modern Drug Discovery Collaborations with Southern Research” presented to the Department of Chemistry at the University of Alabama at Tuscaloosa on 7/28/10 (Host Dr. Kevin Shaughnessy).
- 181) **Reynolds, R. C.** “Aspirin: The Ultimate Chemical Probe” presented to the Center for Integrative Chemical Biology and Drug Discovery, The Eshelman School of Pharmacy, The University of North Carolina at Chapel Hill on August 25, 2010 in Chapel Hill, NC (Host Dr. Stephen Frye)
- 182) **Reynolds, R. C.** “Aspirin: The Ultimate Chemical Probe” presented to the Department of Chemistry, Duke University on August 26, 2010 (Host Dr. Barbara Ramsay Shaw)
- 183) **Reynolds, R.C.** “Targeting the Mycobacterial ATPome” presented to the Department of Pharmaceutical and Biomedical Science at the University of Georgia on August 29, 2010 (Host Dr. Fred Quinn).
- 184) **Reynolds, R.C.** & Harris, D. “Modern Drug Discovery Collaborations with Southern Research” presented to the Department of Chemistry and Biochemistry at Auburn University on 10/26/10 in Auburn, AL (Host Dr. J. V. Ortiz).
- 185) **Reynolds, R. C.** “Aspirin: The Ultimate Chemical Probe” presented under the Chemical Biology and Therapeutics Seminar Series to the Department of Chemical Biology and Therapeutics at the St. Jude Children’s Research Hospital on January 6, 2011 (Host Dr. Richard Lee).
- 186) **Reynolds, R.C.** “Targeting the Mycobacterial ATPome” presented at the United States Medical Research Institute of Infectious Diseases Department of Virology on March 29, 2011 (Host Dr. Gene Gerrard Olinger).
- 187) Whitt, J.D.; Keeton, A.B.; Tinsley, H.N.; Gary, B.D.; Nan, L.; Mathew, B.; **Reynolds, R.C.**; Piazza, G.A. Novel Sulindac Derivatives that Inhibit Colon Cancer Growth by a COX Independent Mechanism Involving PDE5 Inhibition and the Suppression of Nuclear β -Catenin

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Levels. Poster Presentation at the 102nd Annual Meeting of the American Association of Cancer Research in Orlando, FL on April 3rd, 2011 – Abstract #837 Prevention Research 2 “Models and Novel Targets for Prevention 2.”

- 188) Piazza, G.A.; Keeton, A.B.; Tinsley, H.N.; Gary, B.D.; Whitt, J.D.; Nan, L.; Gurpinar, E.; Sun, Y.; Mathew, B.; **Reynolds, R.C.**; Zhang, W.; Singh, R.; Coward, L.; Gorman, G.; Maxuitenko, Y.; Grizzle, W.; Chang, W.-C.; Clapper, M. Colon Cancer Chemopreventive Properties of a non-Cyclooxygenase Inhibitory Amide Derivative of Sulindac. Poster Presentation at the 102nd Annual Meeting of the American Association of Cancer Research in Orlando, FL on April 4th, 2011 – Abstract #1865 Prevention Research 4 “Novel Chemopreventive Agents and Combinations”
- 189) **Reynolds, R.C.** “Targeting the Mycobacterial ATPome” presented to the Center for Ribosomal Origins and Evolution of the Department of Chemistry and Biochemistry at the Georgia Institute of Technology on April 19, 2011 (Host Dr. Loren Williams).
- 190) **Reynolds, R.C.** “The Southern Pilot Scale Library Program – the Preparation of Diverse Nucleoside Antibiotic Libraries” presented to the Institute for Tuberculosis Research of the University of Chicago on July 6, 2011 (Host Dr. Scott Franzblau).
- 191) Mathew, B.; Sosa, M.I.; Sheppard, R.; Manuvahkova, A.; Rasmussen, L.; White, E.L.; **Reynolds, R.C.** Novel Sulindac Sulfide Derivatives for Breast Cancer Chemoprevention – Breast Cancer Idea Award Contract W81XWH-07-1-0463 presented at the Sixth Era of Hope Department of Defense Breast Cancer Research Program Meeting on August 2-6, 2011 in Orlando, FL, Poster session: Risk and Prevention, Wednesday, August 3rd, Poster Abstract P19-5.
- 192) **Reynolds, R. C.** “The Southern Pilot Scale Library Program – the Preparation of Diverse Nucleoside Antibiotic Libraries” a graduate student seminar presented to the Department of Chemistry, Duke University on August 29, 2011 (Host Dr. Barbara Ramsay Shaw).
- 193) **Reynolds, R. C.** “The Southern Pilot Scale Library Program – the Preparation of Diverse Nucleoside Antibiotic Libraries” presented to the Department of Chemistry, Southampton University on September 13, 2011 (Host Dr. Peter Roach).
- 194) **Reynolds, R.C.** “Targeting the Mycobacterial ATPome” presented to the Roach research group in the Department of Chemistry, Southampton University, Southampton, UK on September 13, 2011 (Host Dr. Peter Roach).
- 195) **Reynolds, R.C.** “Targeting the Mycobacterial ATPome” presented to the Besra research group in the School of Biosciences at the University of Birmingham, Birmingham, UK on September 14, 2011 (Host Professor Gurdyal Besra).
- 196) **Reynolds, R. C.** “Classical NSAID Scaffolds as Probes for Chemical Biology” presented under the Department of Medicinal Chemistry Seminar Series at the University of Mississippi, the School of Pharmacy, Department of Medicinal Chemistry on October 11, 2011 (Host Dr. John Rimoldi).
- 197) **Reynolds, R. C.** “*Design and Synthesis of Nucleoside Antibiotic-like Diversity Libraries*” presented to the Department of Chemistry, the University of Alabama at Birmingham on February 9, 2012 (Host Dr. David Graves).
- 198) **Reynolds, R.C.** “Targeting the Mycobacterial ATPome” presented at the United States Medical Research Institute of Infectious Diseases Departments of Bacteriology and Virology on April 10, 2012 (Host Dr. Gene Gerrard Olinger).

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- 199) **Reynolds, R. C.** “Classical NSAID Scaffolds as Probes for Chemical Biology” presented under the auspices of the University of Alabama Comprehensive Cancer Center Division of Hematology & Oncology Cancer Cell Biology Research Program Conference on Monday, April 16, 2012 at Noon in the North Pavilion Board Room 2532 (Host Dr. Boris Pasche).
- 200) **Reynolds, R. C.**, Moukha-chafiq, O., Mathew, B., Pathak, V. “Solution phase parallel synthesis of nucleoside antibiotic analog libraries.” Invited presentation at the Southeastern Regional Meeting of the American Chemical Society at the Raleigh Civic Center on November 16, 2012 during the Frontiers in Nucleic Acids Symposium (Session Chair Dr. David Graves).
- 201) **Reynolds, R. C.** “Classical NSAID Scaffolds as Probes for Chemical Biology” presented to the Department of Pharmaceutical Sciences of the University of Arkansas Medical Sciences on Friday, January 25, 2013 (Hosts Drs. Peter A. Crooks and Cesar M. Compadre).
- 202) **Reynolds, R. C.** “Classical Non-steroidal Anti-inflammatory Drug (NSAID) Scaffolds as probes for Chemical Biology” presented to the Center for Computational Science at the University of Miami Medical Campus on Friday, May 23, 2013 (Host Dr. Stephan Schürer).
- 203) **Reynolds, R.C.** “Phenotypic HTS against *M. tuberculosis*.” Presented at the National Institute of Allergy and Infectious Diseases Integrated Research Facility on June 30, 2014 (Host Dr. Gene Olinger).
- 204) **Reynolds, R.C.** “Phenotypic HTS against *M. tuberculosis*.” Presented via WebEx to IntelliSynRD on November 19, 2014 (Host Dr. Jeff Albert).
- 205) **Reynolds, C.C.** “Potential Collaborations in Drug Discovery.” Presented to the Snowden research group at the University of Alabama at Tuscaloosa in the Department of Chemistry, Shelby Hall on January 27th, 2015 from 1:00-3:00 (host Dr. Timothy Snowden).
- 206) Ekins, S., Clark, A.M., **Reynolds, R.C.** and Freundlich, J.S. Using Bayesian machine learning for bioactivity and target prediction for *Mycobacterium Tuberculosis*. Poster presentation at the Gordon Research Conference on Tuberculosis in Girona, Spain, July 2015.
- 207) Clark, A.M., Dole, K., Coulon-Spector, A., McNutt, A., Grass, G., Freundlich, J.S., **Reynolds, R.C.** and Ekins, S., Development and Sharing of ADME/Tox and Drug Discovery Machine Learning Models – poster presentation at the 260th ACS Meeting Boston, MA from August 16-20, 2015.
- 208) **Reynolds, R.C.** “Two Decades of *M. tuberculosis* Drug Discovery” presented to The UNC Eshelman School of Pharmacy on Monday, August 24th, 2015 at 4:00-5:00 (host Dr. Jeff Aube).

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- Maddry, J. A.; **Reynolds, R. C.**, Secrist III, J. A.; Montgomery, J. A.; Crooks, P. A. “**Polynucleotide Analogs Containing Sulfonate and Sulfonamide Internucleoside Linkages**” October 1, 1996. United States Patent Number 5,561,225.
- Comber, R. N.; **Reynolds, R. C.**; Buchheit, R. W. “**5,5-Disubstituted Hydantoins**” June 16, 1998. United States Patent Number 5,767,140.
- White, E. L.; **Reynolds, R. C.**; Suling, W. J. “**Inhibitors of FtsZ and Uses Thereof**” July 02, 2003. PCT/US2003/20984, and foreign patents published and granted, May 6, 2010. United States Patent Publication US2010/0113429A1. May 18, 2010. United States Patent Number 7,718,651.
- Piazza, G. A. and **Reynolds, R. C.**; “**Derivatives of Sulindac, Use Thereof and Preparation**”

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Reynolds, Robert C. and Grimaldi, Maurizio **“Sulindac and Derivatives Thereof In The Treatment Of Gliomas”** United States Provisional Patent Application 61/470777 filed by Connolly Bove Lodge & Hutz, LLP (21381-00106-US1) on April 01, 2011.

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