

**Principal Investigator/Program Director (Last, first, middle): Phillips, William T.**

### **BIOGRAPHICAL SKETCH**

Provide the following information for the key personnel in the order listed for Form Page 2.  
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

<b>NAME</b>	<b>POSITION TITLE</b>
William T. Phillips	Professor/Clinical

**EDUCATION/TRAINING** (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)

<b>INSTITUTION AND LOCATION</b>	<b>DEGREE</b>	<b>YEAR(s)</b>	<b>FIELD OF STUDY</b>
The University of Texas Health Science Center at San Antonio - San Antonio, TX.	Residency	1985-1987	Nuclear Medicine
Texas Tech University Health Science Center - Lubbock, TX.	Residency	1982-1984	Family Practice
Texas Tech University Health Science Center - Lubbock, TX.	Internship	1980-1981	Internal Medicine
University of Texas Medical Branch - Galveston, TX.	MD	1980	
Eastern New Mexico University - Portales, NM.	BA	1974	

**NOTE:** The Biographical Sketch may not exceed four pages. Items A and B (together) may not exceed two of the four-page limit. Follow the formats and instructions on the attached sample.

**A. Positions and Honors.** List in chronological order previous positions, concluding with your present position. List any honors. Include present membership on any Federal Government public advisory committee.

#### **Positions and Employment**

2001 to Present	Professor, Radiology, Medical School, The University of Texas Health Science Center at San Antonio, San Antonio, TX
1993 to 2001	Associate Professor, Radiology, Medical School, The University of Texas Health Science Center at San Antonio, San Antonio, TX
1988 to 1993	Assistant Professor, Radiology, Medical School, The University of Texas Health Science Center at San Antonio, San Antonio, TX
1987 to 1988	Clinical Assistant Professor, Radiology, Medical School, The University of Texas Health Science Center at San Antonio, San Antonio, TX
1984 to 1985	Research Associate, Research, Pohl Bioelectronics Laboratory/Oklahoma State University, Stillwater, OK

#### **Honors**

01/2003	Who's Who in America
01/2003	Selected for inclusion in America's Best Doctors, USA
01/1996	Selected for Inclusion in America's Best Doctors - Central US

01/1995 Who's Who in Science or Technology  
01/1995 Who's Who in Medicine

**B. Selected peer-reviewed publications (in chronological order). Do not include publications submitted or in preparation.**

- Awasthi VD, Garcia D, Klipper R, Goins BA, Phillips WT. Neutral and Anionic Liposome-Encapsulated Hemoglobin: Effect of Postinserted Poly(ethylene glycol)-distearoylphosphatidylethanolamine on Distribution and Circulation Kinetics. *J Pharmacol Exp Ther* 2004 Apr;309(1):241-248.
- Bao A, Goins B, Klipper R, Negrete G, Phillips WT. Direct 99mTc labeling of pegylated liposomal doxorubicin (Doxil) for pharmacokinetic and non-invasive imaging studies. *J Pharmacol Exp Ther* 2004 Feb;308(2):419-425.
- Metter DF, Woolley FR, Bradley, Y, Morrison, J, Phillips WT, Salman UA, Duffy, D, Smith, R, Graham, J,. Utilization of a Videoteleconference Network to Facilitate Concept Learning in Image Interpretation *Academic Radiology* 2004
- Medina LA, Klipper R, Phillips WT, Goins B. Pharmacokinetics and biodistribution of [111In]-avidin and [99mTc]-biotin-liposomes injected in the pleural space for the targeting of mediastinal nodes. *Nucl Med Biol* 2004 Jan;31(1):41-51.
- Bao A, Goins B, Klipper R, Negrete G, Phillips WT. 186Re-liposome labeling using 186Re-SNS/S complexes: in vitro stability, imaging, and biodistribution in rats. *J Nucl Med* 2003 Dec;44(12):1992-1999.
- Bao A, Goins B, Klipper R, Negrete G, Mahindaratne M, Phillips WT. A novel liposome radiolabeling method using 99mTc-'SNS/S' complexes: in vitro and in vivo evaluation. *J Pharm Sci* 2003 Sep;92(9):1893-1904.
- Awasthi VD, Garcia D, Goins BA, Phillips WT. Circulation and biodistribution profiles of long-circulating PEG-liposomes of various sizes in rabbits. *Int J Pharm* 2003 Mar;253(1-2):121-132.
- AWASTHI V, Garcia D, Klipper R, Goins BA, Phillips WT. Evaluation of anionic liposome encapsulated hemoglobin in rabbits. The 9th International Symposium on Blood Substitutes, Tokyo, Japan 2003. (*Artificial Blood*; vol. 11, no. 1).
- Phillips WT, Goins BA. Radiolabeled liposomes for imaging and bio distribution studies In: Liposomes: A Practical Approach. V Weissig & V Torchilin (eds), Oxford University Press, Oxford, UK; 2003. p. 319 - 336.
- Phillips WT, Medina LA, Klipper R, Goins B. A novel approach for the increased delivery of pharmaceutical agents to peritoneum and associated lymph nodes. *J Pharmacol Exp Ther* 2002 Oct;303(1):11-16.
- Awasthi VD, Goins B, Klipper R, Phillips WT. Accumulation of PEG-liposomes in the inflamed colon of rats: potential for therapeutic and diagnostic targeting of inflammatory bowel diseases. *J Drug Target* 2002 Aug;10(5):419-427.
- Miller AR, Thomason VE, Yeh IT, Alrahwan A, Sharkey FE, Stauffer J, Otto PM, McKay C, Kahlenberg MS, Phillips WT, Cruz AB. Analysis of sentinel lymph node mapping with immediate pathologic review in patients receiving preoperative chemotherapy for breast carcinoma. *Ann Surg Oncol* 2002 Apr;9(3):243-247.
- Phillips WT, Andrews T, Liu H, Klipper R, Landry AJ, Blumhardt R, Goins B. Evaluation of [(99m)Tc] liposomes as lymphoscintigraphic agents: comparison with [(99m)Tc] sulfur colloid and [(99m)Tc] human serum albumin. *Nucl Med Biol* 2001 May;28(4):435-444.
- Phillips WT, Klipper R, Goins B. Use of (99m)Tc -labeled liposomes encapsulating blue dye for identification of the sentinel lymph node. *J Nucl Med* 2001 Mar;42(3):446-451.
- Phillips WT, Klipper R, Goins B. Novel method of greatly enhanced delivery of liposomes to lymph nodes. *J Pharmacol Exp Ther* 2000 Oct;295(1):309-313.
- Phillips WT, Klipper RW, Awasthi VD, Rudolph AS, Cliff R, Kwasiborski V, Goins BA.

- Polyethylene glycol-modified liposome-encapsulated hemoglobin: a long circulating red cell substitute. *J Pharmacol Exp Ther* 1999 Feb;288(2):665-670.
- Phillips WT, Burkett LN. Augmented upper body contribution to oxygen uptake during upper body exercise with concurrent leg functional electrical stimulation in persons with spinal cord injury. *Spinal Cord* 1998 Nov;36(11):750-755.
- Awasthi V, Goins B, Klipper R, Loredo R, Korvick D, Phillips WT. Imaging experimental osteomyelitis using radiolabeled liposomes. *J Nucl Med* 1998 Jun;39(6):1089-1094.
- Awasthi VD, Goins B, Klipper R, Phillips WT. Dual radiolabeled liposomes: biodistribution studies and localization of focal sites of infection in rats. *Nucl Med Biol* 1998 Feb;25(2):155-160.
- Phillips WT, Klipper R, Fresne D, Rudolph AS, Javors M, Goins B. Platelet reactivity with liposome-encapsulated hemoglobin in the rat. *Exp Hematol* 1997 Dec;25(13):1347-1356.
- Phillips WT, Lemen L, Goins B, Rudolph AS, Klipper R, Fresne D, Jerabek PA, Emch ME, Martin C, Fox PT, McMahan CA. Use of oxygen-15 to measure oxygen-carrying capacity of blood substitutes in vivo. *Am J Physiol* 1997 May;272(5 Pt):2492-2499.
- Goins B, Phillips WT, Klipper R, Rudolph AS. Role of complement in rats injected with liposome-encapsulated hemoglobin. *J Surg Res* 1997 Mar;68(2):99-105.
- Green GM, Guan D, Schwartz JG, Phillips WT. Accelerated gastric emptying of glucose in Zucker type 2 diabetic rats: role in postprandial hyperglycaemia. *Diabetologia* 1997 Feb;40(2):136-142.
- Phillips WT, Salman UA, McMahan CA, Schwartz JG. Accelerated gastric emptying in hypertensive subjects. *J Nucl Med* 1997 Feb;38(2):207-211.
- Phillips WT, Tilson KS, Schwartz JG. Use of a physiologic oral glucose solution for screening for impaired glucose tolerance and non-insulin-dependent diabetes mellitus. *Arch Pathol Lab Med* 1996 Sep;120(9):842-846.
- Phillips WT, Schwartz JG. Decelerating gastric emptying: therapeutic possibilities in type 2 diabetes. *Diabet Med* 1996 Sep;13(9 Sup):44-48.
- Schwartz JG, Salman UA, McMahan CA, Phillips WT. Gastric emptying of beer in Mexican-Americans compared with non-Hispanic whites. *Metabolism* 1996 Sep;45(9):1174-1178.
- Goins B, Phillips WT, Klipper R. Blood-pool imaging using technetium-99m-labeled liposomes. *J Nucl Med* 1996 Aug;37(8):1374-1379.
- Guan D, Phillips WT, Green GM. Pancreatic secretion stimulated by CCK is not mediated by capsaicin-sensitive vagal afferent pathway in awake rats. *Am J Physiol* 1996 May;270(5 Pt):881-886.
- Schwartz JG, Green GM, Guan D, McMahan CA, Phillips WT. Rapid gastric emptying of a solid pancake meal in type II diabetic patients. *Diabetes Care* 1996 May;19(5):468-471.
- Goins B, Klipper R, Sanders J, Cliff RO, Rudolph AS, Phillips WT. Physiological responses, organ distribution, and circulation kinetics in anesthetized rats after hypovolemic exchange transfusion with technetium-99m-labeled liposome-encapsulated hemoglobin. *Shock* 1995 Aug;4(2):121-130.
- Schwartz JG, McMahan CA, Green GM, Phillips WT. Gastric emptying in Mexican Americans compared to non-Hispanic whites. *Dig Dis Sci* 1995 Mar;40(3):624-630.
- Phillips WT, McMahan CA, Lasher JC, Blumhardt MR, Schwartz JG. Anterior, posterior, left anterior oblique, and geometric mean views in gastric emptying studies using a glucose solution. *Eur J Nucl Med* 1995 Feb;22(2):154-157.
- Schwartz JG, Phillips WT, Blumhardt MR, Langer O. Use of a more physiologic oral glucose solution during screening for gestational diabetes mellitus. *Am J Obstet Gynecol* 1994 Sep;171(3):685-691.
- Goins B, Klipper R, Rudolph AS, Phillips WT. Use of technetium-99m-liposomes in tumor imaging. *J Nucl Med* 1994 Sep;35(9):1491-1498.
- Schwartz JG, Guan D, Green GM, Phillips WT. Treatment with an oral proteinase inhibitor slows

- gastric emptying and acutely reduces glucose and insulin levels after a liquid meal in type II diabetic patients. Diabetes Care 1994 Apr;17(4):255-262.
- Rudolph AS, Cliff RO, Klipper R, Goins B, Phillips WT. Circulation persistence and biodistribution of lyophilized liposome-encapsulated hemoglobin: an oxygen-carrying resuscitative fluid. Crit Care Med 1994 Jan;22(1):142-150.
- Goins B, Klipper R, Rudolph AS, Cliff RO, Blumhardt R, Phillips WT. Biodistribution and imaging studies of technetium-99m-labeled liposomes in rats with focal infection. J Nucl Med 1993 Dec;34(12):2160-2168.
- Phillips WT, Schwartz JG, McMahan CA. Reduced postprandial blood glucose levels in recently diagnosed non-insulin-dependent diabetics secondary to pharmacologically induced delayed gastric emptying. Dig Dis Sci 1993 Jan;38(1):51-58.
- Phillips WT, Schwartz JG, McMahan CA. Rapid gastric emptying of an oral glucose solution in type 2 diabetic patients. J Nucl Med 1992 Aug;33(8):1496-1500.
- Phillips WT, Rudolph AS, Goins B, Timmons JH, Klipper R, Blumhardt R. A simple method for producing a technetium-99m-labeled liposome which is stable in vivo. Int J Rad Appl Instrum B 1992 Jul;19(5):539-547.
- Schwartz JG, Phillips WT, Langer O. Use of a more physiologic oral glucose solution during testing for gestational diabetes mellitus. Am J Clin Pathol 1992 Jun;97(6):831-835.
- Rudolph AS, Klipper RW, Goins B, Phillips WT. In vivo biodistribution of a radiolabeled blood substitute: 99mTc-labeled liposome-encapsulated hemoglobin in an anesthetized rabbit. Proc Natl Acad Sci U S A 1991 Dec;88(23):10976-10980.
- Lasher JC, Blumhardt R, Phillips WT. The accuracy of quantitative analysis of stress/delayed thallium-201 myocardial tomograms. J Nucl Med 1991 Apr;32(4):749-750.
- Phillips WT, Schwartz JG, Blumhardt R, McMahan CA. Linear gastric emptying of hyperosmolar glucose solutions. J Nucl Med 1991 Mar;32(3):377-381.
- Phillips WT, Schwartz JG, McMahan CA. Rapid gastric emptying in patients with early non-insulin-dependent diabetes mellitus. N Engl J Med 1991 Jan;324(2):130-131.
- Bergh JR, Phillips WT, Blumhardt R. Unusual Case of Entire Lung Ventilation Perfusion Mismatch. In: Yearbook of Nuclear Medicine. Hoffer PB et al., eds; Mosby Yearbook; 1991.
- Schwartz JG, Phillips WT, Aghebat-Khairy B. Revision of the oral glucose tolerance test: a pilot study. Clin Chem 1990 Jan;36(1):125-128.
- Pohl HA, Phillips WT, Blumhardt R. Evidence of AC Fields from Living Biological Cells. In: Energy Transfer Dynamics, Studies and Essays in Honor of Herbert Frolich.. Barrett TW, Phil HA, eds. Springer-Verlag; 1987.
- Goins B, Klipper R, Martin C, Jerabek PA, Khalvati S, Fox PT, Cliff RO, Kwasiborski V, Rudolph AS, Phillips WT. Use of oxygen-15-labeled molecular oxygen for oxygen delivery studies of blood and blood substitutes. Adv Exp Med Biol ;454:643-652.
- Goins BA, Phillips WT. The use of scintigraphic imaging as a tool in the development of liposome formulations. Prog Lipid Res ;40(1-2):95-123.
- Phillips WT, Goins B. Assessment of liposome delivery using scintigraphic imaging. J Liposome Res ;12(1-2):71-80.
- Goins B, Klipper R, Sanders J, Rudolph AS, Phillips WT. Circulation profile of technetium-99m labeled liposome encapsulated hemoglobin in a 10% or 50% rat hypovolemic shock model. Artif Cells Blood Substit Immobil Biotechnol ;22(3):909-915.
- Phillips WT, Rudolph AS, Goins B, Klipper R. Biodistribution studies of liposome encapsulated hemoglobin (LEH) studied with a newly developed 99m-technetium liposome label. Biomater Artif Cells Immobilization Biotechnol ;20(2-4):757-760.

#### **C. Research Projects:**

07/01/2000 -- 06/01/2002

San Antonio Area Foundation  
Novel Method of Greatly Enhanced Delivery to Lymph Nodes

Role:Principal Investigator

05/01/2000 -- 09/01/2003

Office of Naval Research  
Development and Assessment of Long Circulating Oxygen Carriers

Role:Principal Investigator

01/01/1999 -- 12/01/2000

Nycomed Amersham PLC  
Sponsored Research Agreement for the Development of 99mTc-liposomes

Role:Principal Investigator

09/01/1997 -- 03/01/1999

Naval Medical Research and Development Command  
In Vivo Red Blood Cell Biodistribution and Circulation Persistence

Role:

08/01/1994 -- 07/01/1997

National Institute of Health  
Platelet Interaction and Efficacy Studies of Liposome Encapsulated Hemoglobin

Role:Principal Investigator

07/01/1993 -- 06/01/1995

South Texas Health Research Center  
New Therapy of Type II Diabetes in Hispanics

Role:Principal Investigator

12/01/1990 -- 11/01/1993

Naval Medical Research and Development Command  
In Vivo Distribution of Liposome Encapsulated Hemoglobin Studied with a Technetium Marker

Role:Principal Investigator

08/01/1989 -- 02/01/1991

Institutional Grace  
Revision of Oral Glucose Tolerance Test

Role:Principal Investigator

03/01/1988 -- 02/01/1989

Institutional Grant  
Process for Radiolabeling of Leukocytes with 99mTc

Role:Principal Investigator

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