

## BIOGRAPHICAL SKETCH

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NAME Janice A. Carrozzella, RN, BA, CCRC, RT(R)	POSITION TITLE Research Associate		
EDUCATION/TRAINING ( <i>Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.</i> )			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Christ Hospital School of Nursing, Cincinnati, OH	RN	1996	Nursing
Indiana University, Bloomington, IN	BA	1992	Sociology
Univ. of Cincinnati – Raymond Walters College Cincinnati, Ohio	AS - Summa Cum Laude	1982	Radiologic Technology

### A. Positions and Honors.

- 1982 – 1985      Staff Radiologic Technologist, University Hospital, Emergency Department, Cincinnati, OH
- 1985 – 1988      Staff Neuro/Cardiovascular Interventional Technologist, University Hospital, Cincinnati, OH
- 1990 – 1997      Staff Neuro/Cardiovascular Interventional Technologist, University Hospital, Cincinnati, OH
- 1997 – 2002      Unit-Based Intermittent Staff Nurse, Neuroscience Intensive Care Unit, University Hospital, Cincinnati, OH
- 1997 – 2003      Cerebrovascular Research Coordinator, University Hospital, Neurology Department, Cincinnati, OH
- 2003 – 2005      Cerebrovascular Sr. Research Assistant, University of Cincinnati, Neurology Department, Cincinnati, OH
- 2005 – 2007      Cardiovascular / Neurovascular Research Associate, University of Cincinnati, Department of Emergency Medicine, Cincinnati, OH
- 2007 – Present    Clinical Trials Nurse Research Associate, University of Cincinnati, Department of Radiology

### Professional Organizations:

- Association of Clinical Research Professionals
- American Heart Association
- American Registry of Radiologic Technologists

### B. Selected peer-reviewed publications (in chronological order).

1. Ernst R, Pancioli A, Tomsick T, Kissela B, Woo D, Kanter D, Jauch E, **Carrozzella J**, Spilker J, Broderick J. Combined intravenous and intra-arterial recombinant tissue plasminogen activator in acute ischemic stroke. *Stroke*. 31: 2552-2557, November 2000.
2. Clark JF, Pyne GJ, Choutka OJ, **Carrozzella J**, Khoury J, Broderick JP, Cadoux-Hudson TAD. In vitro therapy with dobutamine, isoprenaline and sodium nitroprusside protects vascular smooth muscle metabolism from subarachnoid hemorrhage induced cerebral vasospasm. *Acta Neurochirurgica*. 143:721-728, 2001.
3. McPherson CM, Woo D, Cohen PL, Pancioli AM, Kissela BM, **Carrozzella JA**, Thomas TA, Zuccarello M. Early carotid endarterectomy for critical carotid artery stenosis after thrombolysis therapy in acute ischemic stroke in the middle cerebral artery. *Stroke*. 32: 2075-2080, September 2001.
4. Woo D, Sauerbeck LR, Kissela BM, Khoury JC, Szaflarski JP, Gebel J, Shukla R, Pancioli AM, Jauch EC, Menon AG, Deka R, **Carrozzella JA**, Moomaw CJ, Fontaine RN, Broderick JP. Genetic and Environmental risk factors for intracerebral hemorrhage: preliminary results of a population-based study. *Stroke*. 33: 1190-1196, May 2002.
5. Kissela BM, Sauerbeck L, Woo D, Khoury J, **Carrozzella J**, Pancioli A, Jauch E, Moomaw CJ, Shukla R, Gebel J, Fontaine R, Broderick J. Subarachnoid hemorrhage: a preventable disease with a heritable component. *Stroke*. 33: 1321-1326, May 2002.
6. Clark JF, Huri DA, **Carrozzella J**, Jauch EC, Pritesh M, Heaton D, Biehle SJ, Broderick JP.

- Isoforms of apolipoprotein E can modulate tpa-induced clot lysis *in vitro*. *Frontiers in Bioscience*. 163-168, August 1, 2002.
7. Biehle SJ, **Carrozzella J**, Shukla R, Popplewell J, Swann M, Freeman N, Clark JF. Apolipoprotein E isoprotein-specific interactions with tissue plasminogen activator. *Biochimica et Biophysica ACTA-Molecular Basis of Disease*. 1689: 244-251, August 4, 2004.
  8. Flaherty ML, Woo D, Kissela B, Jauch E, Pancioli A, **Carrozzella J**, Spilker J, Sekar P, Broderick JP, Tomsick TA. Combined IV and intra-arterial thrombolysis for acute ischemic stroke. *Neurology*. 64: 1-3, January (2 of 2) 2005.
  9. Pyne-Geithman GJ, Morgan CJ, Dulaney EM, **Carrozzella J**, Kanter DS, Wagner K, Zuccarello M, Clark JF. Bilirubin production and oxidation in CSF of patients with cerebral vasospasm after subarachnoid hemorrhage. *Journal of Cerebral Blood Flow and Metabolism*. 25: 1070-1077, August 2005.
  10. Khatri, P, Neff, J, Broderick, JP, Khoury, JC, **Carrozzella, J**, Tomsick, T for the IMS I Investigators. Revascularization endpoints in stroke interventional trials: recanalization vs reperfusion in IMS-I. *Stroke*. 36: 2400-2403, November 2005.
  11. Tang Y, Xu H, Du X, Lit L, Walker W, Lu A, Ran R, Gregg J, Reilly M, Pancioli A, Khoury J, Sauerbeck L, **Carrozzella JA**, Spilker J, Clark J, Wagner KR, Jauch EC, Chang DJ, Vero P, Broderick JP, Sharp FR. Gene expression in blood changes rapidly in neutrophils and monocytes after ischemic stroke in humans: a microarray study. *Journal of Cerebral Blood Flow and Metabolism* advance online publication. 1-14, January 2006.
  12. Khatri P, Broderick JP, Khoury J, **Carrozzella J**, Tomsick T: Microcatheter contrast injections during intra-arterial thrombolysis increase intracranial hemorrhage risk. *Stroke* 2006; 37: 622.
  13. Khatri R, Khatri, P, Khoury J, Broderick JP, **Carrozzella J**, Tomsick T. Microcatheter contrast injections during intraarterial thrombolysis increase parenchymal hematoma risk: registry experience. *Stroke*, 38: 454, February 2007.
  14. Khatri P, Hill M, Palesch Y, Spilker J, Jauch E, **Carrozzella J**, Demchuk A, Martin R, Maudlin P, Dillon C, Ryckborst K, Janis S, Tomsick T, and Broderick J for the IMS III Investigators. Methodology of the Interventional Management of Stroke (IMS) III Trial. Accepted *International Journal of Stroke* 2007.
  15. King S, Khatri P, **Carrozzella J**, Spilker J, Broderick J, Hill M, Tomsick T, for the IMS I and IMS II Investigators Anterior Cerebral Artery Emboli in Combined IV/IA Treatment in the IMS I and II Trials. Accepted to *AJNR* 2007.
  16. Tomsick TA, Broderick J, **Carrozzella J**, Khatri P, Hill M, Palesch Y, Khoury J, for the IMS II Investigators: Revascularization Results in the Interventional Management of Stroke II Trial. *AJNR* 2008; 29:582-587.
  17. Khatri P, Broderick JP, Khoury JC, **Carrozzella J**, Tomsick T. Microcatheter contrast injections during intra-arterial thrombolysis may increase intracranial hemorrhage risk. *Stroke*. 2008; 37: In Press.
  18. Kurosawa Y, Lu A, Khatri P, **Carrozzella J**, Clark JF, Tomsick T. Iodinated radiographic contrast material injection and IV heparin administration in a rat middle cerebral artery occlusion and reperfusion model: possible effects on intracerebral hemorrhage. Submitted to *Radiology* May, 2009.

#### BOOK CHAPTER:

1. **Carrozzella J**, Jauch EC. Emergency stroke management: a new era. *The Nursing Clinics of North America*, 37:1 (35-57) March, 2002.

#### ABSTRACTS

1. Woo D, Sauerbeck L, Khoury J, **Carrozzella J**, Moomaw C, Kissela B, Broderick J. Familial Aggregation of Stroke and Intracerebral Hemorrhage. 25<sup>th</sup> American Heart Association International Conference on Stroke and Cerebral Circulation, New Orleans LA, February 2000.
2. Broderick J, Sauerbeck L, Khoury J, **Carrozzella J**, Kissela B, Fontiane R, Wenstrup R, Woo D, Shukla R, Moomaw C. S and Z Mutations in the Alpha-1-Antitrypsin Gene are not Associated with an Increased Risk of Ruptured Intracranial Aneurysm. 25<sup>th</sup> American Heart Association International Conference on Stroke and Cerebral Circulation, New Orleans LA, February 2000.
3. Kissela B, Sauerbeck L, Woo D, Khoury J, Shukla R, Moomaw C, Graus J, **Carrozzella J**, Jauch E, Pancioli A, Broderick J. Subarachnoid Hemorrhage is a Preventable Disease with a Heritable

- Component. 26<sup>th</sup> American Heart Association International Conference on Stroke and Cerebral Circulation, Ft. Lauderdale FL, February 2001.
4. Woo D, Sauerbeck L, Kissela B, Khoury J, Shukla R, Moomaw C, Graus J, **Carrozzella J**, Jauch E, Pancioli A, Broderick J. Genetic and Environmental Risk Factors for Intracerebral Hemorrhage. 26<sup>th</sup> American Heart Association International Conference on Stroke and Cerebral Circulation, Ft. Lauderdale FL, February 2001.
  5. Kissela BM, Tomsick T, Spilker J, Khoury J, Woo D, **Carrozzella J**, Pancioli A, Jauch E, Kanter D, Broderick JP. A novel angiography scoring scale for acute ischemic stroke: relationship to functional outcome. Accepted for presentation at the 27<sup>th</sup> American Heart Association International Conference on Stroke and Cerebral Circulation, San Antonio, TX, February 2002.
  6. Tomsick T, Broderick J, Pancioli A, Jauch E, Woo D, Kissela B, Kanter D, Spilker J, **Carrozzella J**, Ernst R, Gaskill-Shipley M, Cornelius R. Combined IV-IA rt-PA treatment in major acute ischemic stroke. Accepted for presentation at the 27<sup>th</sup> American Heart Association International Conference on Stroke and Cerebral Circulation, San Antonio, TX, February 2002.
  7. Clark JF, Huri DA, **Carrozzella J**, Jauch E, Mehta P, Broderick JP. Isoforms of apolipoprotein E can modulate t-PA induced clot lysis in vitro. Accepted for presentation at the 27<sup>th</sup> American Heart Association International Conference on Stroke and Cerebral Circulation, San Antonio, TX, February 2002.
  8. Jauch E, Dean C., **Carrozzella J**, Smulian AG, Wagner KR. Acute Plasma Protein Expression Patterns Following Ischemic Stroke. Presented at the American College of Emergency Physicians Annual Meeting, Boston, MA, October, 2003.
  9. Biehle SJ, Welshhans J, **Carrozzella J**, Clark JF. tPA vs. TNK: Apolipoprotein E modulation. Presented at the Society for Neuroscience 2003 Annual Meeting Conference, New Orleans, LA, November 2003.
  10. Jauch E, Dean C, **Carrozzella J**, Smulian AG, Wagner KR. Proteomic Analyses Demonstrates Ultra-Early Elevations of Inflammation-Sensitive Plasma Proteins Following Ischemic Stroke. World Stroke Conf., Vancouver, BC, Canada, June, 2004.
  11. Sharp FR, Tang Y, Du X, Lu A, Ran R, Xu H, Verro P, Chang DJ, Reilly M, Pancioli A, Khoury JC, Sauerbeck LR, **Carrozzella JA**, Spilker J, Clark JF, Wagner KR, Jauch EC, Broderick JP. Genomic expression profiles in blood change rapidly following acute ischemic stroke. Presented at the 31<sup>th</sup> American Heart Association International Conference on Stroke and Cerebral Circulation, Kissimmee, FL, February 2006.
  12. Steinbaugh L, Kleindorfer D, Palesch Y, Khatri P, **Carrozzella JA**, Broderick JP. Gender differences in response to intra-arterial rt-PA. Presented at the 31<sup>th</sup> American Heart Association International Conference on Stroke and Cerebral Circulation, Kissimmee, FL, February 2006.
  13. Khatri P, Broderick JP, Khoury JC, **Carrozzella JA**, Tomsick TA. Microcatheter contrast injections during intra-arterial thrombolysis increase intracranial hemorrhage risk. Presented at the 31<sup>th</sup> American Heart Association International Conference on Stroke and Cerebral Circulation, Kissimmee, FL, February 2006.
  14. Tomsick T, Khatri P, **Carrozzella J**, Broderick J. Comparison of recanalization during EKOS microLysis catheter assisted versus standard microcatheter thrombolysis. Presented at the 31<sup>th</sup> American Heart Association International Conference on Stroke and Cerebral Circulation, Kissimmee, FL, February 2006.
  15. JL Leach, C McPherson, AS Vagal, **J Carrozzella**, P Theodosopoulos, R Warnick. Operative integration of functional MRI and tractography at 3T: correlation of resection extent with post-operative clinical outcome in patients with brain neoplasia. Presented at the RSNA Meeting, Chicago, ILL, November 30-December 5, 2008.
  16. H Tao, G Ramadas, **J Carrozzella**, P Khatri, J Broderick, T Tomsick, IMS I and II Investigators. Symptomatic parenchymal hematoma type 2 (PH2) is not associated with larger lesion volume in combined IV/IA therapy. Presented at the annual ASNR Meeting. Vancouver, BC, CA, May, 2009.

#### **PRESENTATIONS:**

1. ASA International Stroke Conference - Fourth State-of-the Art Stroke Nursing Symposium  
Co-presenter: Acute Stroke Case Study: IV/IA rt-PA (First 24 Hour Immediate Nursing Care Issues: Blood Pressure Management, Temperature, Blood Sugar, ICP). February 1, 2005 New Orleans, Louisiana.

#### **C. Research Support.**

3 P50 NS44378-02S2 (PI: Tomsick, T) 05/11/2005-Present  
NIH/NINDS UCLA SPOTRIAS Center Application Program Project

**MR and Recanalization of Stroke Clots Using Embolectomy (MR RESCUE)**

Multi-center, randomized, blinded outcome, controlled trial of embolectomy versus medical management in 120 patients with acute stroke and randomization stratified by penumbral pattern.

Role: Study Coordinator

UO1 NS52220 (PI: Broderick, J, Co-PI Tomsick, T) 09/2005-Present

NIH/NINDS

Interventional Management of Stroke (IMS III) Trial

IMS III is a phase III, randomized, multi-center, open label, 900 subject clinical trial that will examine whether a combined intravenous (IV) and intra-arterial (IA) approach to recanalization is superior to standard IV rt-PA (Activase®) alone when initiated within three hours of acute ischemic stroke onset.

Role: Imaging Data Manager of forty-two North American & Australian clinical sites.

2P50NS044283 (PI: Flaherty, M) 08/2008-Present

NIH/NINDS UC SPOTRIAS Center Application Program Project

The Spot Sign for Predicting and Treating ICH Growth (STOP-IT) Study

A phase II, randomized, multicenter, double-blind, placebo-controlled trial comparing rFVIIa to placebo for treatment of subjects with acute ICH and contrast extravasation (the spot sign) identified on CTA.

Role: Project Manager of 10 North American clinical sites

P50NS44283 (PI of Neuro-Imaging Core: Tomsick, T) 08/2008-Present

NIH/NINDS UC SPOTRIAS Center Application Core Project

The goal of the neuro-imaging core is to collect, de-identify, transfer, and store brain imaging from participating SPOTRIAS subjects, particularly subjects entered into the SPOTRIAS trials (i.e., CLEAR-ER, STOP-IT, and MR RESCUE). One of the goals of this core is for all SPOTRIAS Centers to develop a shared database of de-identified image data, linked to phenotypic and genetic data that can be used by SPOTRIAS network investigators as well as other investigators.

Role: Imaging Coordinator

No Study Number (PI: Abruzzo, T) 12/09/2007-Present

The Neuroradiology Education and Research Foundation

The primary purpose of this study is to demonstrate that intracranial aneurysm recurrence after coil embolization involves a combination of aneurysm growth and coil compaction.

Role: Study Coordinator

**Completed Research Support**

R01 NS39160 (PI: Broderick, J.) 9/30/2000-3/31/2005

NIH/EKOS Corporation

"Interventional Management of Stroke"

Interventional Management of Stroke (IMS II) Part II Study: Phase II study to obtain reliable estimates of the efficacy and safety of a treatment approach combining intravenous and intra-arterial **rt-PA** therapy and low-intensity ultrasound energy for the treatment of acute ischemic stroke.

Role: Project Manager of thirteen North American clinical sites and study coordinator at nine local Cincinnati / Northern Kentucky performance sites.

P50 NS44283 (PI: Broderick, J.) 9/30/2002 – 8/31/2007

NIH

Specialized Programs of Translational Research

in Acute Stroke (SPOTRIAS)"The major goal of SPOTRIAS program is to establish centers at institutions with a strong commitment to the rapid treatment of acute stroke patients and which have demonstrated an active collaboration between emergency medical services, emergency physicians, neurologists, and radiologists.

Specifically, The University of Cincinnati SPOTRIAS encompasses 4 core projects and 3 basic projects.

Project 2 seeks to employ a functional proteomics approach to identify serum proteins that are associated with intracerebral hemorrhage following administration of intravenous and intra-arterial r-TPA. A long-term goal is to

develop serum marker assays to improve patient selection for thrombolytic therapies in acute stroke. The project is expected to lead to development of further proteomics studies of ischemic and hemorrhage stroke.  
Role: Research Nurse – Project 1 and overall study

R34 NS049722 Broderick (PI) 07/01/2004 – 6/30/2005

NIH/NINDS

“Interventional Management of Stroke III Planning Grant”

The major goals of this project are to plan for the submission of and possible execution of a major multicenter phase III trial on the interventional management of stroke.

Role: Project Manager

No Study Number (PI: Jauch, E.) 2002-2003

EMF / FERNE

Emergency Medicine Foundation / Foundation for Education and Research in Neurologic Emergencies

“Functional Proteomics Identification of Serum Proteins Associated with Intracerebral Hemorrhage Following Thrombolytic Therapy for Acute Ischemic Stroke”

The major goal of this project is to develop serum marker assays to improve patient selection for all thrombolytic therapies in acute stroke. Additionally, the protein library created by this project may identify new proteins associated with ischemic stroke leading to new diagnostic assays with clinically relevant sensitivity, specificity, and accuracy for cerebral ischemia.

Role: Study Coordinator

No Study Number (PI: Tomsick, T.) 2000-2002

Possis Medical, Inc.

“AngioJet Thrombectomy in Middle Cerebral Artery Embolism (TIME 1) Study

The major goal of this project is to characterize the technical performance of the Possis AngioJet Rheolytic™ Thrombectomy System (AngioJet System) NV150 Catheter in the treatment of acute ischemic stroke.

Role: Study Coordinator

No Study Number (PI: Broderick, J.) 2000-2001

The Neuroscience Institute

“Apolipoprotein E and Thrombolytic Therapy Study”

The goal of this study is to collect data proving Isoforms of apolipoprotein E can modulate t-PA induced clot lysis in vitro to impact on the therapeutic benefit of t-PA.

Role: Study Coordinator

No Study Number (PI: Zuccarello, M and Woo, D.) 2000-2002

The Neuroscience Institute

“Stereotactic Aspiration of Spontaneous ICH Aided with t-PA thrombolysis in patients with intracerebral hemorrhage.

Role: Study Coordinator

R01 NS40229 (PI: Zuccarello, M. and Woo, D.) 2000-2002

NIH/NINDS

“Hemicraniectomy & Durotomy Upon Deterioration for Massive Hemispheric Infarcts (HeADDFIRST)”

Study to evaluate the benefit of surgical decompression for life-threatening swelling from large supratentorial cerebral hemispheric infarction.

Role: Study Coordinator

R01 NS36695 (PI: Broderick, J.) 1997-2001

NIH/NINDS

“Genetic and Environmental Risk Factors for Hemorrhagic Stroke”

Study to determine the important genetic and environmental risk factors for intracerebral and subarachnoid hemorrhage.

Role: Nurse Clinician