

CURRICULUM VITAE

Name: Valeriy V. Kozmenko

Business Address: 2020 Gravier St
New Orleans, LA 70112

Business Telephone: (504) 568-2134

Fax: (504) 599-1453

E-Mail: vkozme@lsuhsc.edu

Education:

Other Harrisburg Area Community College, Pennsylvania, 2001-2002
(honors)

Post-Graduate Donetsk State Medical University, Anesthesiology and Intensive
Care & Emergency Medicine), 2000, 1st qualification category
degree, license awarded

Residency Lugansk State Medical University, Ukraine, (Anesthesiology and
Intensive Care & Emergency Medicine) 1992-1995,
Anesthesiology and Intensive Care & Emergency Medicine,
license awarded

Graduated Lugansk State Medical University, Ukraine, 1992, MD degree
diploma awarded

Internship Lugansk State Medical University, Ukraine, 1991-1992

Entered Lugansk State Medical University, Ukraine, 1984

Certification:

Anesthesiology and Intensive Care & Emergency Medicine,
Basic Life Support (BSL)

Awards and Honors:

Outstanding teacher's award at LSU HSC 2007
Outstanding teacher's award at LSU HSC 2006
Outstanding teacher's award at LSU HSC 2005
Harrisburg Area Community College honors of high academic achievement

Academic, Professional, and Research Appointments:

Human Patient Simulation Lab, Director – April 2005 - present
Assistant Professor of Clinical Anesthesiology 2004- present
Instructor of Anesthesiology LSU School of Medicine New Orleans – 2002 - 2004
Assistant Director of the Anesthesia and Critical Care Simulation Lab

Membership in Professional Organizations:

Society for Simulation in Healthcare
Medicine Meets Virtual Reality
International Anesthesia Research Society
Generalists in Medical Education Society
American Association of Medical Colleges

Teaching Experience/Responsibilities (this can include some narrative description):

1. Director of Applied Human Patient Simulations at LSU HSC.
2. Director of the Anesthesia and Critical Care Simulation Lab
3. Design and implementation of what we believe to be the first curriculum in the U.S. for students employing simulation. Each junior student goes through 8 sessions with the simulator learning to manage complex emergency medical problems before they have to do the same in the real world. This involves my teaching 350 2 hour sessions each year.
4. Curriculum development and implementation for fourth year Anesthesiology rotations students. This involves eighty eight 2 hour sessions per year
5. Participation in the Office of Medical Education (OME) project of developing a new and more effective methods of active teaching and learning
6. Development and implementation of curriculum employing simulation in management of major medical emergencies for the Internal Medicine and Pediatrics residencies Residency Skills Fair.
7. Developed and implemented the first ever Mass Casualty Drill using Distributed Simulation at Camp Villere, January 2003 in conjunction with the National Guard and LA State Police. This program resulted in more than \$544,000 funding from the Guard for development of this portable simulation pilot.

8. Development and implementation an OR crisis management course “Bad Day in OR” with 4th year medical school students, residents and practicing physicians as the target audience.
9. Working as a beta tester of new features in METI simulation software.
10. Developing new software for authentic Human Patient Simulation (patent pending)
11. Teaching surgical teams better team communication skills with the use of high fidelity simulators
12. Teaching for effective team communication skills with the use of high fidelity simulators for the surgical teams at several hospitals in Louisiana

Undergraduate and GME Students Trained:

| | |
|---------------------------------------|------|
| Pediatric Residents | 360 |
| Medicine Residents | 160 |
| 3 rd year medical students | 1400 |
| 4 th year medical students | 360 |
| SRNAs | 30 |

Teaching Awards:

Outstanding teacher’s award at LSU HSC 2007
 Outstanding teacher’s award at LSU HSC 2006
 Outstanding teacher’s award at LSU HSC 2005

Grants & Contracts:

1. AHRQ Patient Safety \$2,000, 000 grant - awarded
2. \$544,000 funding from National Guard to develop and pilot Distributed Simulation program - funded
3. Louisiana Board of Regents – equipment enhancement – funded
4. National Science Foundation – Science of Learner Catalyst Proposal

Inventions & Patents:

1. Developing significant enhancement in METI Human Patient Simulation programs (patent pending)
2. Development of true multitasking method in delivery simulated cases with the use ECS (Emergency Case Simulators). This method has been used in training the National Guard personnel using the ECS system.
3. Developing a screen-based simulator for Allied Health Professions (copyright protected)

Journal Publications (an appendix can be attached that provides narratives on research interests):

1. “Advanced case scenarios based on the clinical model provide more effective training” submitted for the annual meeting of the Society Medicine Meets Virtual Reality, Long Beach, CA, February 2007
2. **Paige J, Kozmenko V, Morgan B, Howell D, Chauvin S, Hilton C, Cohn Jr. I, O’Leary J.** From the Flight Deck to the Operating Room: An Initial Pilot Study of the Feasibility and Potential Impact of True Interdisciplinary Team Training using High Fidelity Simulation. Article published in the *Journal of Surgical Education*, Volume 64(6). November/December 2007.
3. **Paige J, Kozmenko V, Yang T, Paragi R, Cohn I, Hilton C, Chauvin S.** Debriefing at the Point of Care in High Fidelity, Simulation-based Operating Room Team Training. Published article in the *2007 AHRQ Patient Safety Publication*.
4. **Chauvin S, Paige J, Kozmenko V, Yang T, Paragi R, Cohn Jr. I.** Evaluation of the System for Teamwork Effectiveness and Patient Safety. Published in the *Agency for Healthcare Research and Quality (AHRQ) Program Brief Meeting manual*. September 27, 2007.
5. **Paige J, Kozmenko V, Yang T, Paragi R, Cohn Jr. I, Hilton C, Chauvin S.** The Mobile Mock Operating Room: Bringing Team Training to the Point of Care. Abstract submitted to the *AHRQ Advances in Patient Safety: New Directions and Alternative Approaches*. August, 2007
6. Riopelle J, Ruiz D, Hunt J, Mitchell M, Mena J, Rigol J, Jubelin B, Riopelle A, **Kozmenko V**, Miller M. Circumferential Adjustment of Ultrasound Probe Position to Determine the Optimal Approach to the Internal Jugular Vein: A Noninvasive Geometric Study in Adults. Published article in the *Anesthesia & Analgesia Journal*. February, 2005
7. Desselle B, **Kozmenko V.** Evaluation of a Pediatric Resident Skills Fair to Improve Procedural Knowledge and Confidence. Published in the Annual meeting of the Association of Pediatric program directors manual.
8. “Developing and Implementing a Human Patient Simulation Curriculum for Junior Medical School Students,” article published in the proceedings of the 2nd Swedish-American Workshop on Modeling and Simulation, Cocoa Beach, FL, February 2004

Books & Chapters:

Valeriy Kozmenko, Barbara Morgan, Allan Kaye, Charles Hilton *“Theory and Practice of Developing an Effective Simulation-based Clinical Curriculum,”* “Clinical Simulation: Operations, Engineering and Management,” editors Richard Kyle and Bosseau Murray, Elsevier, 2008

Videos & Multimedia:

1. LSU HSC promotional TV program
2. “Health Call” TV program about medical human patient simulation and its use in the current medical education
3. Louisiana “Channel 4” TV program about the National Guard Small Scale Mass Casualty Disaster Drill and the LSU active involvement in this project.
4. Medical Education and Technology Inc., promotional video
5. Developing video tutorials for the endovascular simulator VIST

Scientific Exhibits:

1. Demonstration of the Clinical Model (patent pending) as an Artificial Intelligence Agent at HPSN 2006, Tampla, FL, 2006
2. Demonstration of the Clinical Model (patent pending) at the international meeting of the Society for Simulation in Healthcare, Orlando, FL, January 2007

Papers Presented & Abstracts:

1. *“Advanced Case Scenarios Based on the Clinical Model Provide More Effective Training for Anesthesiology Residents and Students” presented at the AUA 55th Meeting hosted by Duke University, Durham, NC, May 15-18, 2008*
2. **Kozmenko V, Paige J, Chauvin S.** *“Initial Implementation of Mixed Reality Simulation Targeting Teamwork and Patient Safety”*. Abstract submitted to Medicine Meets Virtual Reality Meeting, Long Beach, California. January 28-February 1, 2008
3. **Paige J, Kozmenko V, Yang T, Paragi Gururaja R, Hilton C, Cohn Jr I, Chauvin C.** *“High-Fidelity, Simulation-Based, Interdisciplinary Operating Room Team Training at the Point of Care”*. Manuscript submitted and rejected for publication in *Annals of Surgery*. February 2008.

4. **Paige J, Kozmenko V, Yang T, Paragi R, Cohn Jr. I, Hilton C, Chauvin S.** “Debriefing at the Point of Care in High Fidelity, Simulation-based Operating Room Team Training.” Abstract submitted to the *AHRQ Advances in Patient Safety: New Directions and Alternative Approaches*. August, 2007.
5. **Paige J, Kozmenko V, Yang T, Paragi R, Cohn Jr. I, Hilton C, Chauvin S.** “Portable Audio/Video Recording System Makes Teaching with the Human Patient Simulator and Clinical Model More Effective.” Abstract submitted to the *AHRQ Advances in Patient Safety: New Directions and Alternative Approaches*. August, 2007.
6. **Paige J, Kozmenko V, Yang T, Paragi R, Cohn Jr. I, Hilton C, Chauvin S.** “Advanced Case Scenarios Based on the Clinical Model Provide More Effective Training.” Submitted manuscript to the *AHRQ Advances in Patient Safety: New Directions and Alternative Approaches*. August, 2007
7. “Advanced case scenarios based on the clinical model provide more effective training” submitted for the annual meeting of the Society Medicine Meets Virtual Reality, Long Beach, CA, February 2007
8. “Advanced case scenarios based on the clinical model provide more effective training” presented at the annual meeting of the Society for Simulation in Healthcare, Orlando, LF, January 2007
9. “Immersive high-fidelity simulator based teaching for the anesthesiology nursing students results in steady performance patterns in trainees,” presented at International Society for Medical Simulation, San Diego, CA, January 2006
10. “Let’s see what happened: Development of an innovative quad screen technology for comprehensive recording interdisciplinary team training in a virtual operating room environment,” presented at International Society for Medical Simulation, San Diego, CA, January 2006
11. “Developing and implementation of the Clinical Model as a tool of creating dynamic OR environment that carries elements of Artificial Intelligence,” presented at HPSN 2006, Tampa, FL, 2006
12. “Creating rich learning and teaching environment based on the principles of adult learning to teach emergency case management to medical undergraduate students with use of Human Patient Simulator,” presented on the meeting of the Southern Section of Society for Clinical Investigation, New Orleans, LA, February 2005
13. “Immersive high-fidelity simulator based teaching for the anesthesiology nursing students results in steady performance patterns in trainees,” presented at the meeting of Southern Section of Society for Clinical Investigation, Atlanta, GA, 2006

14. "Now I Will Remember It For The Rest of My Life!" or theory and practice of developing highly effective Human Patient Simulation curriculum, presented at the International Meeting of Human Patient Simulation Network, Tampa, FL, February 2005
15. "Mandatory Human Patient Simulation Curriculum for Undergraduate Medical Students: two years of experience and results," presented at the International Meeting of Human Patient Simulation Network, Tampa, FL, February 2005
16. "Theory and practice of developing an effective human patient simulation curriculum for junior medical students using high fidelity simulators," presented at the meeting of Society for Technology in Anesthesia and International Meeting for Medical Simulation, Miami, January 2005
17. "Teaching Clinical Skills for undergraduate medical students through inquiry with the use of high fidelity Human Patient Simulator," presented at the meeting of Society for Technology in Anesthesia and International Meeting for Medical Simulation, Miami, FL, January 2005
18. "Effective use of high-end technology at Louisiana State University Health Sciences Center", presented as a workshop at the meeting of American Association of Medical Colleges, Boston, MS, November 2004
19. "Successful use of a high fidelity Human patient simulator in bed-side teaching for junior medical school students," presented at the meeting of American Association of Medical Colleges, Boston, MS, November 2004
20. "Developing and Implementing Human Patient Simulation Curriculum for Junior Medical Students" presented at the meeting of Generalists in Medical Education Society, Boston, MS, November, 2004
21. "Creating A rich learning and teaching environment for junior medical students using high fidelity Human Patient Simulator," presented at the meeting of Generalists in Medical Education Society, Boston, MS, November, 2004
22. "Use of high fidelity simulator in training physicians to improve patient's safety in hospital environment," presented at the meeting of the Society of Hospitalists, New Orleans, LA April, 2004
23. "Human Patient Simulation in Medical Education" presented at the 8th annual meeting of International Association of Medical Educators, New Orleans, LA, July 2004

24. Article “Ultrasound-Guided Optimization of the Approach to the Internal Jugular Vein: an Anatomic Study in Adults” submitted to the Anesthesia & Analgesia journal with my role as a contributing author
25. “Mass Casualty Drill Pilot Program” manual of use ECS portable simulators in developing mass casualty disaster scenarios, author
26. “Developing and implementing Human Patient Simulation curriculum for junior medical school students,” the author The paper has been published at the 2nd Swedish-American Workshop on Modeling and Simulation (SWAMAS – 2004) sponsored by Swedish Defense Research Agency, University of Central Florida, Linköpings universitet and U.S. Army Research, Development and Engineering Command.)
27. “Successful use of the Human Patient Simulator in interactive clinical bed-side teaching of junior and senior LSU School of Medicine students”, the author, presented at the 2004 Annual Meeting of Society for Technology in Anesthesiology and International Meeting for Medical Simulation Society, Santa Fe, New Mexico, January 2004
28. “Developing and Implementing a Human Patient Simulation Curriculum for Junior Medical School Students,” abstract presented at the 2nd Swedish-American Workshop on Modeling and Simulation, Cocoa Beach, FL, February 2004
29. “Initial Evaluation of bedside teaching with medical students using high fidelity human patient simulation,” presented at the Annual meeting of Southern Society for Clinical Investigation, New Orleans, LA, February 2004
30. “Designing a simulation program for the third year medical school curriculum using Human Patient Simulation,” presented at the Annual Meeting of Human Patient Simulation Network (HPSN), Tampa, FL, March 2004
31. “Mass Casualty Drill Pilot Program” presented at the Annual Meeting of Human Patient Simulation Network (HPSN), Tampa, FL, March 2004
32. “Evaluation of a Pediatric Resident Skills Fair to Improve Procedural Knowledge and Confidence,” contributing author, Annual meeting of the Association of pediatric program directors
33. “Use of Human Patient Simulation in Medical Education,” presented at the Annual meeting of Louisiana society of Anesthesiologist, New Orleans, LA, January, 2004
34. “Designing Multilayer Scenario to Accomplish Rich Teaching and Learning Environment”, in progress, will be submitted to the Academic Medicine for publication

Seminars & Invited Presentations (V. Prof., etc):

1. “Mass Casualty Drill Pilot Program” presentation and workshop presented at the International Annual Conference of the Human Patient Simulation Network Conference (February 2003, Sarasota Florida) organized by Medical Education & Technology, Inc
2. “LSUHSC Homeland Defense project” presentation at the Louisiana State Committee of Homeland Security presented on July 30th 2003 in Baton Rouge.
3. Presentation as an invited medical educator at the Society of Hospital Medicine Annual Board, New Orleans, 2004, April 20-21st.
4. “Use of Human Patient Simulation in Medical Education,” presented at the Annual meeting of Louisiana society of Anesthesiologist, New Orleans, LA, January, 2004
5. “Use of Human Patient Simulator in Medical Education,” presented at the clinical conference at Tulane University, New Orleans, LA, June 6, 2005,
6. Conducting two simulation courses as visiting professor for the Anesthesiology residents at LSU in Shreveport

Editorial Activities:

Abstract proposal reviewer for Society for Simulation in Healthcare in 2006.

University/Institutional Service (note leadership responsibilities):

Member of the “Curriculum – Oversight” committee

Community Service/Activities:

1. Development and delivery of the first in the United States Small Scale Mass Casualty Drill on the Camp Villary National Guard compound in cooperation with the State Police, National Guard, Acadian Ambulance, and Fire Department.
2. Training the National Guard representatives to operate Emergency Case Simulator.
3. On the phone assistance to the National Guard in running the Emergency Case Simulator on the military drills in Texas.
4. Training the participants of the National Youth Leadership Forum

5. Presentation of the Simulation Lab to the Louisiana community on the LSU Family day.
6. Presentation of the Simulation Lab to high-school junior students from several parishes of Louisiana
7. Presentation of the Simulation Lab to the international visitors from Belgium, Hungary, Spain and Russia.
8. Presentations of the Human Patient Simulator to 8 AHEC summer camp students
9. Presentation of the Human Patient Simulation lab at the LSU Family day events (2003, 2004, 2005, 2006, 2007, 2008)

Administrative Responsibilities (this can include some narrative description):

1. Developing simulation software based on LSU patented technology for distribution among US medical schools as well as abroad (Canada, Asia, Germany and Australia)
2. Carrying responsibility for the developing and improving Simulation Lab curriculum for the 3rd year medical school students and the 4th year anesthesiology rotation medical students.
3. Developing the curriculum and administration teaching sessions for Anesthesia Nursing Students
4. Developing curriculum and administration of teaching to interdisciplinary surgical teams (surgeons, anesthesiologists, CRNAs, nurses)
5. Member of the LSU Curriculum Oversee committee.
6. Maintenance of the Human Patient Simulation system, anesthesia delivering system and the other equipment in full functional order.
7. Management of equipment and supplies needed for running the Anesthesia and Critical Care Simulation Lab
8. Keeping documentation of the Anesthesia and Critical Care Simulation Lab
9. Developing educational software
10. Educating and supervising two simulation specialists at LSU HSC
11. Conducting simulator based teaching and training for the internal medicine and emergency medicine residents