

CURRICULUM VITAE

Brenda A. Gentz, M.D.

4496 N. Saddle View Drive
Tucson, Arizona 85750
(520) 760-2407

EDUCATION

| | |
|-------------|--|
| Spring 1983 | University of Salamanca Salamanca, Spain |
| 1981-1986 | Willamette University Salem, Oregon Major: Spanish, B.A., 1985 Major: Chemistry, B.A., 1986 |
| 1987- 1991 | University of Washington School of Medicine Seattle, Washington M.D. |
| 1991-1993 | Preliminary Surgery University of Washington Medical Center Seattle, Washington |
| 1993-1995 | Anesthesiology Residency University of Arizona Integrated Residency Phoenix, Arizona |
| 1995-1996 | Chief Resident University of Arizona Integrated Residency Department of Anesthesiology Phoenix, Arizona |
| 1996-1997 | Regional Anesthesiology Fellowship Virginia Mason Medical Center Seattle, Washington |

EMPLOYMENT

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|---------------|--|
| 2007- present | Associate Professor of Anesthesiology University of Arizona, Tucson, AZ |
| 1999-2007 | Assistant Professor of Clinical Anesthesiology University of Arizona, Tucson, Arizona |

1997-1999 Attending Anesthesiologist
 Maricopa Medical Center, Phoenix, AZ

1988 Summer Research Technologist 1
 Fred Hutchinson Cancer Research Center
 V.A. Medical Center, Seattle, Washington

1985-1987 Research Technologist 1
 University of Washington
 Department of Chemical Engineering

CERTIFICATION

| | | |
|---|------------|------------|
| Advanced Trauma Life Support | exp. 10/13 | 2009 |
| Advanced Cardiac Life Support | Completed | 3/28/15 |
| ABA Certification - #29573 | | 1997 |
| Arizona State Medical License #09580 | exp. 4/17 | 2015 |
| Washington State Medical License #025209 | exp. 4/17 | 2015 |
| Basic Life Support | Completed | 3/28/15 |
| CITI Human Research Curriculum Completion | | 04/15/2015 |
| Conflict of Interest (Citi Program) | | 04/15/2015 |
| UA Disclosure of Significant Financial Interest | | 04/15/2015 |

HONORS AND AWARDS

1982 Academics,
 Alpha Lambda Delta and Phi Eta Sigma Honors

1982 Language
 Phi Sigma Iota Honorary

1984 Leadership,
 Omicron Delta Kappa Honorary

1984-1985 Mortar Board
 Willamette University

1985 Willamette Senior Key Service Award

1986 Burnell R. Brown, Jr. M.D., Ph.D., F.F.A.R.C.S.
 Outstanding Resident Award

1998 Anesthesiology Teaching Award
 “Attending of the Year”

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| 1999 | Anesthesiology Teaching Award “Attending of the Year” |
| 2000 | Anesthesiology Teaching Award “Certificate of Appreciation” |
| 2001 | Anesthesiology Teaching Award “Certificate of Appreciation” |
| 2002 | Anesthesiology Teaching Award “Certificate of Appreciation” |
| 2010 | Anesthesiology Teaching Award “Outstanding Educator Award” |
| 2010-2016 | “Best Doctor” Listing |

SERVICE

- | | |
|--|----------------|
| American Society of Anesthesiologist | |
| Past Chair, Section on Annual Meeting | 2016-2017 |
| Chair, Section on Annual Meeting | 2015-2016 |
| First Vice-Chair, Section on Annual Meeting | 2014-2015 |
| Second Vice-Chair, Section on Annual Meeting | 2013-2014 |
| Teller, House of Delegates | 2001, 2002 |
| Alternate Delegate | 1999- 2003 |
| Delegate | 2003 – Present |
| Leadership Spokesperson Training Program | 2003, 2006 |
| Panels Committee (Annual Meeting) | 2003 – 2007 |
| Annual Meeting Oversight Committee | 2007 – Present |
| ASA Executive Committee on Annual Meeting Oversight | 2013 - Present |
| Equipment and Facilities Committee | 2007-2008 |
| Chair, Education Subcommittee on Fundamentals of Anesthesia | 2007- 2014 |
| Outreach Education Committee | 2007 – 2012 |
| Washington D.C. Legislative Conference | 2004 – 2009, |
| Anesthesia Teaching Bill passage resulted in \$500,000 increased revenue to department | 2014, 2016 |
| Advocacy Video for Veteran’s Affairs | 2015 |
| Reference Committee, Scientific Affairs | 2011 |

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| Chair, Reference Committee, Scientific Affairs | 2012 |
| Committee on Women in Anesthesia, ad hoc | 2016 - present |
| Committee on Professional Oversight | 2015-2016 |
| Annual Meeting Ad Exhibitor's Advisory Committee | 2013-2016 |
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| American Society of Regional Anesthesia | 1997 – present |
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| Arizona Society of Anesthesiologist | |
| Past President | 2006- 2007 |
| President | 2005 – 2006 |
| President-elect | 2004 – 2005 |
| Vice President | 2003 – 2004 |
| Secretary | 2001- 2003 |
| South Central District Director | 2000- 2003 |
| Resident Advisor | 1999- 2007 |
| Medical Student ad hoc committee | 2000- Present |
| Membership Committee | 2001- 2003 |
| Chair, Arizona State Society Meeting Program | 2006 – Present |
| Chair, Bylaws Committee | 2010- Present |
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| ARMA (Arizona Medical Association) | 2003 – 2010, 2014 – 2015 |
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| Association of University Anesthesiologists | 2015 - present |
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| University of Arizona, College of Medicine: | |
| Dean's Council on Faculty Affairs | 2015-2019 |
| Admissions Interviewer | 2000, 2003-05 |
| Medical Student Advisor | 2003 |
| Member, Student Advising Committee | 2003 |
| Post-match Scramble Advisor | 2003-2010 |
| Residency Application Advisor | 2003-2010 |
| Medical Student Advisor | 2003-2010 |
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| Hospital Committees: | |
| University Medical Center JCAHO Compliance Subcommittee | 2000 |

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| Medical Staff Appeals Committee | 2001 |
| Pre/Post Anesthesia Testing Task Force | 2005- 2007 |
| UAHN Leadership Development (9/19/13, 2/26/14) | 2013, 2014 |

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| Maricopa Medical Center | |
| Credentialing | 1998-1999 |
| Operating Room Performance Improvement | 1997-1999 |
| Anesthesiology Chair Search Committee | 1998 |

Departmental Committees:

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| University Medical Center | |
| Resident Education Committee | 1999-Present |
| Clinical Competency | |
| Academic Program Review Self Study Committee | 1999-2000 |
| Resident Recruitment | 1999-2006 |
| Executive/Finance Committee | 2000-2013 |
| Compliance | 2005 |
| Quality Control | 2004-2005 |
| Chair, Women's Faculty Adv. Committee | 2002-2003 |
| Research Committee | 1999-2013 |
| Extraordinary Citizen Award | Sept. 20, 2008 |
| Maricopa Medical Center | |
| Resident Education | 1998-1999 |
| Perioperative Services | 1998-1999 |

Departmental Activities:

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| Postanesthesia Care Unit Director | 1999- 2002 |
| Director of Regional Anesthesia | 1999- 2008 |
| Regional Anesthesia Workshop | 2005 |
| Co-Director of Acute Pain Service | 2005 -2008 |
| Director of GI Anesthesia Division | 2011- Present |
| Anesthesia in Non-Operating Room Locations | |
| Coordinator, Peripheral Nerve Block Workshop | 2005 |

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| AAMC Mid-Career Women Faculty Professional Development Seminar (Attendance by application/invitation only) | 2012 |
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Lectures

Anesthesiology Resident Education Lectures 1997- Present

Morning Conference
Celiac Plexus Block
Epidural Abscesses
Introduction to Regional Anesthesia
Spinal and Epidural Anesthesia
Postanesthesia Care Unit (7/19/13, 7/18/14)
Pediatric Pain Management
Anesthetic Considerations and Obesity(4/22-3/13)
Anesthesia in Burn Patients
Neuraxial Complications (3/25/14, 2/28/16)
Anesthesia Management for ECT(11/25/14,12/1/16)
Peripheral Nerve Injuries (05/24/16)

Grand Rounds Lectures

Complications of Regional Anesthesia
Local Anesthetics
Anesthesia in Satellite Locations
Anesthetic Considerations for the Burn Patient
06/05/2013
Creating the Safe Non-Operating Room Anesthesia
(NORA) Experience (October 21, 2015)
Bier Blocks(Nov 12, 2014)
Damage Control Resuscitation(Nov 11, 2015)

Nursing Lectures

Introduction to Airway Management 4/1/14
Anesthesia Process for Nursing Students 10/21/14
Introduction to Anesthesia 12/18/14

Pain Fellowship Lectures 2004-Present

Celiac Plexus Block
Peripheral Nerve Block Complications 8/26/16

Medical Student Enrichment Course Lectures 2000- Present

Spinal and Epidural Anesthetics

Invited Manuscript Reviews 2002-Present

Clinical Journal of Pain
Anesthesia and Analgesia

PUBLICATIONS

Peer-reviewed:

1. Wagner, B.A.; To.T.; Teller, D.E.; McCarthy, J.L.: Estimation of the Distribution of Molecular Weights of Lignins by Use of Low Pressure Size Exclusion Chromatography Holzforschung 40. Suppl.: 67 – 43, December, 1986.
2. Lange, H.; Wagner, B.; Yan, J.F.; Kaler, E.W.; McCarthy, J.L.; Computer Modeling Structure of Gymnosperm Lignin and Delignification of Hemlock (Tsuga) Wood, Tappi Int. Symp. Wood and Pulping Chem., Raleigh Prod.:577-583, May 22-25, 1989.
3. Gentz, B.A.; Shupak, R.; Bhatt, S.; Bay, C.: Carbon dioxide dynamics during apneic oxygenation: the effects of preceding hypocapnia. J.Clin. Anesth. 1998 May; 20-23: 189-194.

Review Articles:

4. Gentz, B.A.; Malan, T.P Jr. Renal toxicity with sevoflurane: a storm in a teacup? Drugs. 61(15):2155-62, 2001.
5. Gentz, B.A.: Alternative therapies for the management of pain in labor and delivery. Clinical Obstetrics and Gynecology. 44(4):704-32, 2001 Dec.
6. Gentz, B.A. Anesthesia in Satellite Locations. Refresher Course Lecture Syllabus. 2010 American Society of Anesthesiologists.
7. Gentz, B.A. Anesthesia in Satellite Locations. Refresher Courses Lecture Syllabus. 2011 American Society of Anesthesiologists.
8. Gentz, B.A. Anesthesia in Satellite Locations. Refresher Course Lecture Syllabus. 2012 American Society of Anesthesiologists.
9. Gentz, B.A. Anesthesia in Satellite Locations. ASA Refresher Courses in Anesthesiology. 40:32-9, 2012.

Abstracts

1. Gentz, B.A.; Tritch T.; Mulroy, M.F.; Impact of General and Regional Anesthesia on Discharge Processing in Knee Arthroscopy Patients. Poster presentation at the Annual Meeting of the American Society of Regional Anesthesia, 1997.
2. (Poster Presentation) Min, A.A., Addis I.B., Eggers, E.D., Gentz, B.A., Harris, S., Tang A., Wright, A., and Martinez, GF. Junior faculty group mentoring Program- Initial understandings from a pilot interdisciplinary hybrid approach. AAMC National Meeting. Learn. Serve. Lead. Conference November 2017, Boston, MA. (Submitted.)

Medically Challenging Cases

1. Matika, R., Hameroff, S., Gentz, B.A. Medically Challenging Case. (poster). Case of Intraoperative Noncardiogenic Pulmonary Edema with Profound Hypoxemia. 2010 American Society of Anesthesiologists Annual Meeting, October 19, 2010.
2. Matika, R., Hameroff, S., Gentz, B.A. Medically Challenging Case. (poster). Case of Intraoperative Noncardiogenic Pulmonary Edema with Profound Hypoxemia. 2010 American Society of Anesthesiologists Annual Meeting, October 19, 2010.
3. Castro, A., Gentz, B. Poster Presentation. Direct renin inhibitors and refractory intraoperative hypotension. WARC 2013. May 12, 2013.

SCHOLARLY PRESENTATIONS

1. Wagner, B.A., Association of Her-2/neu Gene Amplification with Protein Overexpression, University of Washington Senior Research Project, 1991.
2. Gentz, B.A., Shupak, R.; Elias, M.; Arterio-Venous Gradient of Carbon

Dioxide during Apneic Oxygenation following Hyperventilation. Poster Presentation at the Annual Meeting of the American Society of Anesthesiologists, 1994. Oral presentation at the Western Anesthesia Research Conference, 1994.

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3. Gentz, B.A.; Tritch T.; Mulroy, M.F.; Impact of General and Regional Anesthesia on Discharge Processing in Knee Arthroscopy Patients. Poster presentation at the Annual Meeting of the American Society of Regional Anesthesia, 1997.
4. Gentz, B.A. Invited Lecture. Complications of Regional Anesthesia. Arizona Society of Anesthesiologists: 29th Annual Scientific Meeting. February 17, 2003
5. Gentz, B.A. Invited Lecture. Local Anesthetics. Department of Anesthesiology Grands Rounds. October 2003.
6. Gentz, B.A. Invited Lecture. Local Anesthetics. Department of Orthopedics Grand Rounds. *October 13, 2003, Sept. 23, 2005*
7. Gentz, B.A. Invited Lecture. Regional Anesthesia in the O.R. Department of Emergency Medicine. *February 17 and March 9, 2004.*
8. Gentz, B.A. Invited Lecture. Local Anesthetics. Department of Anesthesiology Grands Rounds. October 2003.
9. Gentz, B.A. Bishop, M., Elliot, S. Succeeding on the Clinical Track. Educational Forum. October 22, 2009. University of Arizona Office of Faculty Affairs. Second Faculty Development Panel.
10. Gentz, B.A., Practice Assessment in MOCA- A Demonstration of One Pragmatic Approach. Luncheon Panel. 2009 American Society of Anesthesiologists Annual Meeting, New Orleans, LA.
11. Gentz, B.A. Invited Refresher Course Lecture. Anesthesia in Satellite Locations. October 16, 2010. 2010 American Society of Anesthesiologists Annual Meeting.

12. Gentz, B.A. MOCA: Practice Assessment, Panel, 2010 American Society of Anesthesiologists Annual Meeting.

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13. Gentz, B.A. Invited Refresher Course Lecture. Anesthesia in Satellite Locations. February 2011 Arizona Society of Anesthesiologists Annual Meeting.
14. Gentz, B.A. Invited Refresher Course Lecture. Anesthesia in Satellite Locations. October, 2011. 2011 American Society of Anesthesiologists Annual Meeting.
15. Gentz, B.A. Invited Refresher Course Lecture. Anesthesia in Satellite Locations. October 2012. American Society of Anesthesiologists Annual Meeting, Washington, D.C.
16. Castro, A., Gentz, B. Poster Presentation. Direct renin inhibitors and refractory intraoperative hypotension. WARC 2013. May 12, 2013.
17. Gentz, B.A. (moderator/speaker), Osborn, I., Mason, K. Lerman, J. A Tour of the Outfield; Anesthetic Considerations, Challenges and Solutions. American Society of Anesthesiologists Annual Meeting, San Francisco, CA. October 12, 2013.
18. Gentz, B.A. (moderator/speaker), Osborn, I., Mason, K., Absalom, A., Creating the Safe Non-Operating Room Anesthesia (NORA) Experience. American Society of Anesthesiologists Annual Meeting, New Orleans, LA. October 14, 2014.
19. Gentz, B.A. Invited Gastroenterology Fellows Lecture. Anesthesia in the GI Lab. March 24, 2015.
20. Gentz, B.A. (panel) Reducing Harm to Improve Outcomes in Non-Operating Room Locations. European Society of Anesthesiologists Annual Meeting, Berlin, Germany. May 31, 2015.
21. Gentz, B.A. Damage Control Resuscitation in Trauma. 62nd Congresso Brasileiro, Florianopolis, Brazil. November 18, 2015.
22. Gentz, B.A. Challenges in Non-Operating Room Locations. 62nd Congresso Brasileiro, Florianopolis, Brazil. November 18, 2015.

23. Gentz, B.A., Wlody, D., Domino, K., (panel) Peripheral nerve block complications: from nerve stimulation to ultrasound. European Society of Anesthesiologists Annual Meeting, London, UK. May 29, 2016.

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24. Gentz, B.A., Urman, R., Abdelmalak, B.(panel) There is a Non-OR Case: Should I Stay or Should I Go? American Society of Anesthesiologists, Chicago, Ill. October 22, 2016.
25. Gentz, B.A., Domino, K., Plagenhoeff, J. (panel) ASA-Peripheral Nerve Block Complications: from nerve stimulation to ultrasound. Congresso Brasileiro de Anesthesiologia. 63rd Brasilia Controversias. Sociedade Brasileira de Anesthesiologia. Brasilia, Brazil. November 14, 2016.

Roundtable Discussions:

1. Gentz, B.A. Preoperative Testing. Annual PSH Summit 2016. Chicago, Illinois. Saturday, June 25, 2016.

RESEARCH PROJECTS

1. A Randomized, Double-Blind, Active-Controlled Study of the Safety and Efficacy of SKY0404 (Propofol Injectable Emulsion 2%) Versus Diprivan Injectable Emulsion 1% in Balanced Anesthesia (Protocol No. SKY0404-020: 8/27/02, Revised to Incorporate Amendment 1.) (PI: Dr. Palmer; sponser: SkyPharma : \$135,100)
2. A Double-Blind Controlled Pilot Study of High-Dose Capsaicin Patches in the Treatment of Pain Associated with Postherpetic Neuralgia (C102) 1.) (PI: Dr. Malan; Sponser: NeurogesX: \$52,525)
3. An Open Label Extension Study of High-Concentration Capsaicin Patches for the Treatment of Postherpetic Neuralgia (Protocol No. C106: 7/17/02) 1.) (PI: Dr. Malan; sponsor: NeurogesX: \$60,400)
4. A Randomized, Double-Blind, Controlled Dose Finding Study of NGX-4010 for the Treatment of Postherpetic Neuralgia (Protocol No. C108: 4/8/03) 1.) (PI: Dr. Malan; sponsor: NeurogesX).
5. Epidural sustained release encapsulated morphine (SKY0401) in the management of postoperative pain following cesarean section.

(Presentation: Society for Obstetric Anesthesia and Perinatology Annual Meeting, Phoenix, AZ, May 2003.) (PI: Dr. Palmer SubPI: Drs. Nogami and Gentz; sponsor: SkyPharma: \$97,500)

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6. The Effects of Continuous Femoral Nerve Catheter Anesthesia on Narcotic Usage After Total Knee Arthroplasty, (PI: Dr. Davis SubPI: Drs. Benjamin, Tabaa, Camarata, Kay, Gentz). Prepared for IRB submission 2005.
7. A randomized double-blind controlled study of NGX-4010 for the treatment of postoperative neuralgia (Protocol No. C116-3/18/05) (PI: Dr. Malan; sponsor NeurogesX, CoPI: Drs. Hackzell, Loeb and Gentz: \$51,855).
8. A Multicenter, open-label, phase 2 study of NGX-4010 for the treatment of neuropathic pain in patients with painful HIV-associated neuropathy (HIV-AN) or postoperative neuralgia (PHN). (Protocol No. C118) (PI: Dr. Malan; sponsor: NeurogesX, CoPI: Drs. Hackzell, Loeb and Gentz:\$64,230).

CURRENT RESEARCH PROJECTS

1. Acoustical Respiratory Rate Monitoring during Endoscopy. Asimi, N., Gentz, BA, Cunningham, J., Stoike, EJ. Description: Respiratory rate should be monitored continuously during outpatient procedures to avoid delay in detection of respiratory depression. Use of a nasal cannulae and carbon dioxide detection are currently used during upper endoscopy, but are not always reliable. The null hypothesis of this study is that acoustical respiratory rate monitoring during endoscopy is not superior to capnography.
2. Continuing Medical Education Meeting Attendance Study. Racker, N., Lichtenthal, P. and Gentz, BA. A study to determine the motivators and detractors that affect an attendees decision to attend an “on-site” meeting for CME rather than online or other educational materials. “Beta Test Completed.” Survey currently being revised prior to distribution

3. A Comparison of Intravenous Regional Anesthesia using Half the Volume of 1% Lidocaine with a Forearm Tourniquet versus 0.5% Lidocaine and an Upper Arm Tourniquet in Distal Upper Extremity Surgery. Gentz, BA. Frazier, D., DeSilva, G. Sheppard, J, Turker T., Becker G. (Univ. of Arizona College of Medicine GME Grant 2014: \$3500)

4. Institutional Retrospective Review of Bier Blocks. Heringer, D. Turker, T. Gentz, B. Multidepartment IRB application being submitted.