

# Curriculum Vitae

Neil Brown MD PhD FRCS(C) FACS FAANS

## Postgraduate Medical Education

### University of Western Ontario

London, Ontario

- i) surgical internship June 15, 1991 - June 14, 1992
- ii) neurosurgical residency July 1, 1992 - June 30, 1996  
one year research credit given for PhD for total of 6 year program (credit given by both Royal College of Physicians and Surgeons of Canada and American Board of Neurological Surgeons)

**Note:** three month mini-fellowship in spinal instrumentation July 1 to September 30, 1995 taken at **Barrow Neurological Institute** under tutelage of Drs. Sonntag and Dickman.

iii) **certification** neurosurgery August 29, 1996 (Canadian)  
*Fellow of Royal College of Surgery (Canada)* {FRCS(C)} November 8, 1996  
(member # 457851)

iv) **certification** by the *American Board of Neurological Surgery* November 13, 2002 (#22066);  
**re-certification** expires December 31, 2022

v) **certification** by the *American Board of Spine Surgery* November 10, 2004  
**re-certification** expires December 31, 2024

## Post-Secondary Education:

1. University of Western Ontario  
London, Ontario

**Field:** Applied Mathematics

**Degree:** HBSc, June 9, 1983

2. McGill University  
Montreal, Quebec

**Field:** Physics

**Degree:** MSc, June 12, 1986

3. University of Western Ontario  
London, Ontario

**Field:** Medicine (MD-PhD program)

**Degrees:** MD, June 7, 1991

PhD (Medical Biophysics), June 10, 1994

**Scholarships:** NSERC studentship 1984-1985  
MRC studentship 1985-1988

**Medical Licenses:**

1. Arizona License number 23330, date 7/28/95; expires 9/28/17
2. Florida License number ME-0071692, date 10/17/96; expires 1/31/17
3. Illinois License number 036-096331, date 8/6/97; expires 7/31/17
4. California License number C50657, date 9/5/01; expires 9/30/17

**Other Certificates:**

1. BLS (Basic Life Support) Date 2/24/14; expires 2/16
2. ACLS (Advanced Cardiac Life Support) Date 1/31/14; expires 2/16

**Employment History:**

1. Neil Brown MD PhD PA  
5300 West Hillsboro Blvd., Suite 103  
Coconut Creek, FL 33073  
Duration: February 18, 2005 - present
2. Minimally Invasive Spine & Neurosurgery Medical Clinic Inc.  
29243 Clear Spring Lane  
Highland, CA 92346 (Corporate Address)  
Duration: June 2, 2002 - February 1, 2005
3. Carle Clinic Association  
Division of Neurosurgery  
602 West University Ave.  
Urbana, IL 61801  
Duration: Nov. 97 - June 30, 2001  
Acting Chief ( July 2000 - June 30, 2001)
4. Ocala Neurosurgical Center, Inc.  
1901 SE 18<sup>th</sup> Avenue  
Ocala, FL 34474  
Duration: Dec. 96 - July 97.

**Academic Appointments:** (Nov 97 - June 2001)

1. Clinical Instructor, Faculty of Medicine, University of Illinois, Champaign - Urbana
2. Senate appointee, Department of Surgery, Faculty of Medicine, University of Illinois

**Biophysical & Biomechanical Publications:**

1. Zamir M, Brown N. Arterial branching in various parts of the cardiovascular system. *Am J Anat* 1982; 163: 295-307.
2. Zamir M, Brown N. Internal geometry of arterial bifurcations. *J Biomechanics* 1983; 16:857-863.
3. Zamir M, Brown N. Pressure rise at arterial bifurcations. *Angiology* 1984; 35: 645-658.
4. Roach MR, Brown N. What protects arm arteries from atherosclerosis. In: Liepsch D, ed. *Biofluid Mechanics. Blood Flow in Large Vessels. Proceedings of the 2nd International Symposium Biofluid Mechanics and Biorheology*. Berlin: Springer-Verlag, 1990: 7-16.
5. Brown N. A mathematical model for the formation of cerebral aneurysms. *Stroke* 1991; 22: 619- 625.
6. Brown N. Impedance matching at arterial bifurcations. *J Biomechanics* 1993; 26: 59-67.
7. Brown N. Biophysical design of human arteries. PhD thesis, University of Western Ontario, 1993.

**High Energy Nuclear Physics (Particle Physics) Publications (ARGUS Collaboration):**

1. Albrecht H, *et al* (ARGUS Collaboration). Production and decay of the F meson in  $e^+e^-$  annihilation at 10 GeV centre-of-mass energy. *Phys Lett* 1985; 153B: 343-348.
2. Albrecht H, *et al* (ARGUS Collaboration). Search for narrow states coupling to  $\tau$  pairs in radiative  $\Upsilon$  decays. *Phys Lett* 1985; 154B: 452-456.
3. Albrecht H, *et al* (ARGUS Collaboration). Search for fractionally charged particles produced in  $e^+e^-$  annihilation. *Phys Lett* 1985; 156B: 134-138.

4. Albrecht H, *et al* (ARGUS Collaboration). Observation of antideuteron production in electron-positron annihilation at 10 GeV center of mass energy. Phys Lett 1985; 157B: 326-332.
5. Albrecht H, *et al* (ARGUS Collaboration). Direct evidence for W exchange in charmed meson decay. Phys Lett 1985; 158B: 525-530.
6. Albrecht H, *et al* (ARGUS Collaboration). Radiative decays of the  $\Upsilon(2S)$  into the three  $\chi_b$  states. Phys Lett 1985; 160B: 331-336.
7. Albrecht H, *et al* (ARGUS Collaboration). Observation of the B-meson decay into  $J/\psi$ . Phys Lett 1985; 162B: 395-399.
8. Albrecht H, *et al* (ARGUS Collaboration). An upper limit on the mass of the Tau neutrino. Phys Lett 1985; 163B: 404-407.
9. Albrecht H, *et al* (ARGUS Collaboration). Search for gluinos in decays of the  $\chi_b(1^3P_1)$  meson. Phys Lett 1986; 167B: 360-364.
10. Brown N. Gamma-gamma physics with the Argus detector. MSc thesis, McGill University 1985.

## Invited Speaker

1. Back Care Forum: Neurological Assessment of C-Spine Injury (9/10/98) *sponsored by Carle Foundation Hospital*. Urbana, Illinois
2. Debate: (Con side) Controversies in Neurophysiology: Monitoring EEG during Carotid Endarterectomy (10/4/98) *sponsored by the American Clinical Neurophysiology Society*. New Orleans
3. Foundation Day: Carotid Artery Surgery (11/5/98) *sponsored by the Carle Foundation Hospital*, Urbana, Illinois
4. Femoral Allograft in Reconstruction of the Spine (4/6/01) *sponsored by the Carle Foundation Hospital*, Urbana, Illinois
5. Intracerebral Hemorrhage (2/03): given to Internal Medicine residents at Arrowhead Regional Medical Center
6. Lumbar Microdiscectomy with the Metr'x System (9/21/03): Western Neurosurgical Society

## Conferences / Courses / Symposia Attended 1996 - present

### 1996

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|---|---------------------|
| 1. AANS / CNS Joint Section : Cerebrovascular Surgery | 1/23/96 - 1/25/96   |
| 2. Joint Conference Stroke / Cerebral Circulation     | 1/25/96 -           |
| 3. Advanced Thoracic and Lumbar Spine Management      | 10/18/96 - 10/20/96 |

### 1997

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| 1. 1997 Reimbursement Update for Neurosurgeons | 02/07/97 - 02/08/97 |
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### 1998

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|---|---------------------|
| 1. AANS / CNS Joint Section : Cerebrovascular Surgery | 02/01/98 - 02/04/98 |
| 2. Joint Conference Stroke / Cerebral Circulation     | 02/05/98 - 02/07/98 |
| 3. NCCTG Neuro-Oncology Symposium                     | 04/18/98            |
| 4. Surgical Approaches to the Skull Base              | 04/23/98 - 04/25/98 |
| 5. Spine Review Hands On: For Young Neurosurgeons     | 08/15/98 - 08/21/98 |

### 1999

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|---|---------------------|
| 1. House Ear Institute: Temporal Bone Dissection Course | 01/16/99 - 01/20/99 |
| 2. Surgery & Management of the Brachial Plexus          | 04/22/99 - 04/23/99 |
| 3. Congress of Neurological Surgeons Annual Meeting     | 10/30/99 - 11/04/99 |
| 4. CNS Practical Course: Microvascular Reconstruction   | 10/31/99            |

**2000**

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| 1. AANS / CNS Joint Section Spine & Peripheral Nerves        | 02/22/00 - 02/26/00 |
| 2. Special Course: Lumbar Instability and Fusion             | 02/23/00            |
| 3. Advanced Applications in Image Guided Surgery             | 03/10/00 - 03/12/00 |
| 4. AANS Annual Meeting                                       | 04/08/00 - 04/13/00 |
| 5. Special Course: Minimally Invasive Microdiscectomy        | 04/08/00            |
| 6. Anterior Column Support of the Spine: Fusion vs. Motion   | 11/08/00 - 11/11/00 |
| 7. Cervical Spine Research Society: 7th Instructional Course | 12/02/00 - 12/03/00 |

**2001**

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| 1. AANS / CNS Joint Section : Cerebrovascular Surgery                          | 02/09/01 - 02/12/01 |
| 2. Special Course: Critical care of neurosurgical and<br>endovascular patients | 02/09/01            |
| 3. Interurban Neurosurgical Meeting  | 03/09/01            |
| 4. Pedicle Fixation in the Thoracic Spine (MERI)                               | 05/19/01            |
| 5. Pedicle Fixation with the SEXTANT System (MERI)                             | 06/07/01            |
| 6. Minimally Invasive Spine Surgery  | 08/02/01 - 08/04/01 |
| 7. Special Course: Vertebroplasty  | 09/30/01            |
| 8. Special Course: Kyphoplasty   | 09/30/01            |
| 9. Congress of Neurological Surgeons Annual Meeting                            | 10/01/01 - 10/04/01 |

**2002**

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|---|---------------------|
| 1. Neuro-Oncology 2002: Current Concepts      | 02/02/02 - 02/04/02 |
| 2. Neurotrauma and Sports Medicine Review     | 02/14/02 - 02/18/02 |
| 3. AANS Annual Meeting                        | 04/08/02 - 04/11/02 |
| 4. Osler Institute Neurosurgery Review Course | 05/25/02 - 05/27/02 |
| 5. Your Practice Your Business                | 09/27/02 - 09/29/02 |
| 6. Congress of Neurological Surgeons          | 09/22/02 - 09/25/02 |
| 7. North American Spine Society Meeting       | 10/29/02 - 11/03/02 |
| 8. American Board of Neurological Surgery     | 11/12/02 - 11/13/02 |

**2003**

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| 1. Total Spine: Advances in Theory, Technique & Technology | 04/03/03 - 04/06/03 |
| 2. Western Neurosurgical Society                           | 09/20/03 - 09/23/03 |

**2004**

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| 1. The Management of Chronic Spinal Pain company sponsor                 | 03/20/04 - 03/21/04 |
| 2. Minimally Invasive Endonasal Pituitary Course                         | 03/16/04            |
| 3. Inflatable bone tamp technology course (Kyphon sponsor)               | 06/04/04            |
| 4. Center of Excellence Advance Spine Preceptorship<br>(Company sponsor) | 06/17/04 - 06/18/04 |
| 5. AMA Guides to the Evaluation of Permanent Impairment                  | 11/03/04            |

**2005**

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| 1. AANS Annual Meeting               | 04/07/02 - 04/10/02 |
| 2. Congress of Neurological Surgeons | 10/08/05-10/13/05   |

**2006**

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|---|---------------------|
| 1. North American Spine Society Meeting | 09/24/06 - 09/30/06 |
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**2007**

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| 1. AANS Annual Meeting                  | 04/14/07 - 04/19/07 |
| 2. Florida Neurosurgical Society        | 08/25/07            |
| 3. ISIS Phase 1 Lumbar Injection Course | 09/08/07 - 09/09/07 |

**2008:**

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| 1. ISIS Cervical Injection Course    | 06/05/08 - 06/08/08 |
| 2. Congress of Neurological Surgeons | 09/22/08 - 09/25/08 |

**2009:**

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| 1. South Florida Chapter of the American College of Surgeons | 01/22/09 |
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**2010:**

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| 1. Congress of Neurological Surgeons | 10/16/10 - 10/22/10 |
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**2011:**

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| 1. AANS Annual Meeting | 04/11/11 - 04/13/11 |
| 2. SAS Annual Meeting  | 04/25/11 - 04/29/11 |

**2012:**

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|---|---------------------|
| 1. Southern Neurosurgery Society Annual Meeting         | 03/28/12 - 03/31/12 |
| 2. Johns Hopkins Traumatic Brain Injury                 | 06/01/12            |
| 3. AMA Guides 6 <sup>th</sup> Edition Training Course   | 06/09/12 – 06/10/12 |
| 4. SEAK: IME Skills for Physicians: The Masters Program | 06/30/12 – 07/01/12 |

**2013:**

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|---|---------------------|
| 1. Annual Symposium on Current Concepts in Spinal Disorders | 01/31/13 – 02/02/13 |
| 2. Southern Neurosurgery Society Annual Meeting             | 02/21/13 - 02/23/13 |
| 3. AANS Annual Meeting                                      | 04/27/13 – 05/01/13 |
| 4. American Society of Biomechanics                         | 09/04/13 – 09/07/13 |
| 5. Congress of Neurological Surgeons                        | 10/21/13 - 10/23/13 |

**2014:**

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|---|---------------------|
| 1. Southern Neurosurgery Society Annual Meeting | 02/19/14 - 02/22/14 |
| 2. ISAS   | 04/30/14 – 05/02/14 |
| 3. Western Neurosurgical Society                | 08/17/14 – 08/19/14 |

**2015:**

1. Western Neurosurgical Society

09/11/15 – 09/13/15

**Clinical Memberships****General:**

1. American Medical Association
2. Florida Medical Association
3. Broward County Medical Association
4. Palm Beach County Medical Association

**Neurosurgical or Spine:**

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| 1. American Association of Neurological Surgeons               | 2000 |
| 2. American College of Spine Surgery                           | 2004 |
| 3. Congress of Neurological Surgeons                           | 1999 |
| 4. Canadian Neurosurgical Society                              | 1998 |
| 5. Illinois Neurosurgical Society                              | 2001 |
| 6. Florida Neurosurgical Society                               | 2007 |
| 7. Joint Section AANS / CNS : Cerebrovascular                  | 1997 |
| 8. Joint Section AANS / CNS : Spine & Peripheral Nerve         |      |
| 9. Joint Section AANS / CNS : Neurotrauma & Critical Care      | 2001 |
| 10. North American Spine Society (NASS)                        | 2001 |
| 11. California Association of Neurological Surgeons            | 2003 |
| 13. Western Neurosurgical Society                              | 2003 |
| 14. International Spine Intervention Society                   | 2007 |
| 15. International Society for the Advancement of Spine Surgery | 2011 |

**Boards:**

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|---|------|
| 1. American Board of Neurological Surgery             | 2002 |
| 2. American Board of Spine Surgery                    | 2004 |
| 3. Royal College of Physicians and Surgeons of Canada | 1996 |

Note: induction as Fellow of the American College of Surgery in October 2008

**Other Memberships:**

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| American Society of Biomechanics | 2013 |
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