CURRICULUM VITAE Vito Domenico BRUNO, MD PhD

PERSONAL INFORMATION

| Name | VITO DOMENICO BRUNO |
|-----------|-----------------------------|
| Address | BRISTOL HEART INSTITUTE |
| | UPPER MAUDLIN STREET |
| | BS2 8HW, BRISTOL |
| | UNITED KINGDOM |
| Telephone | + 44 07892704226 |
| E-mail | vitodomenicobruno@gmail.com |
| | vitodomenicobruno@me.com |
| | |

Nationality Italian

WORK EXPERIENCE

| • Dates (from – to) • Employer • Sector • Position held • Main activities and responsibilities | October 2002 – July 2007 University Hospital of Varese (Italy) Cardiac Surgery Specialization Training program in Cardiac Surgery Clinical and surgical management of Cardiac surgery patients. Trainee in Cardiac Surgery: 1st or 2nd assistant in about 600 major cardiac surgery procedures. Management of pre-operative assessment and post-operative care of cardiac surgery patient in intensive care unit and cardiac surgical ward |
|--|---|
| • Dates (from – to) • Employer • Sector • Position held • Main activities and responsibilities | July 2007 – July 2009 University Hospital of Bristol (United Kingdom) Cardio-Thoracic Surgery Clinical Fellow in Cardiothoracic Surgery (Specialist Registrar level) Clinical and surgical management in the preoperative, intraoperative (as first Surgeon and assistant) and postoperative care of cardio-thoracic patients. Clinical Audit and Research in Cardio-Thoracic Surgery. Multidisciplinary meeting in Cardiac Surgery and Thoracic Surgery Outpatients clinics of Cardio-Thoracic patients |
| • Dates (from – to) • Employer • Sector • Position held • Main activities and responsibilities | July 2009 – March 2011 University Hospital of Varese (Italy) Cardiac Surgery Staff Surgeon Clinical and surgical management in the preoperative, intraoperative (as first Surgeon and assistant) and postoperative care of cardiac surgery patients. Outpatients clinic co-ordinator. |

| • Dates (from – to) • Employer • Sector • Position held • Main activities and responsibilities | July 2011 - December 2012 University Hospital Of Bristol (United Kingdom) Cardio-Thoracic Surgery Clinical Fellow in Cardiothoracic Surgery (Specialist Registrar level) Clinical and surgical management in the preoperative, intraoperative (as first Surgeon and assistant) and postoperative care of cardio-thoracic patients. Clinical Audit and Research in Cardio-Thoracic Surgery. |
|--|---|
| | Multidisciplinary meeting in Cardiac Surgery and Thoracic Surgery. Outpatients clinics of Cardio- Thoracic patients |
| • Dates (from – to) • Employer • Sector • Position held • Main activities and responsibilities | January 2013 - October 2014 Cardiocentro Ticino Lugano (Switzerland) Cardiac Surgery Staff Surgeon ("Chef de Clinique") Clinical and surgical management in the preoperative, intraoperative (as 1 st assistant) and postoperative care of cardiac patients. Surgical preparation in Pace-Maker, ICD and CRT-D insertion. |
| • Dates (from – to) • Employer • Sector • Position held • Main activities and responsibilities | November 2014- up to now Bristol Heart Institute Cardiac Surgery Senior Registrar Clinical and surgical management in the preoperative, intraoperative (as first Surgeon and assistant) and postoperative care of cardio-thoracic patients. |

Clinical Audit and Research in Cardio-Thoracic Surgery.

Multidisciplinary meeting in Cardiac Surgery and Thoracic Surgery. Outpatients clinics of Cardio-Thoracic patients

EDUCATION AND TRAINING

| • Date | September 10, 2002 |
|-------------------------|--|
| • Organization | University of Insubria Medical School, Varese, Italy |
| • Qualification awarded | Degree in Medicine and Surgery |
| • Date | July 25, 2003 |
| • Organization | University of Insubria Medical School, Varese, Italy |
| • Qualification awarded | Italian Medical Council Registration |
| • Date | October 2002 – October 2007 |
| • Organization | University of Insubria Medical School, Varese, Italy |
| • Qualification awarded | Residency in Cardiac Surgery |
| • Date | May 9, 2007 |
| • Organization | General Medical Council of the United Kingdom |
| • Qualification awarded | UK Medical Council Registration |
| • Date | February 2006 – June 2006 |

| Date | February 2006 – June 2006 |
|---|---|
| Organization | University of Milano Medical School, Milano, Italy |
| Qualification awarded | Post-graduate course on peripheral vascular eco-color-doppler |

| Date | November 2007 – February 2011 |
|---|--|
| Organization | University of Insubria, Medical School, Varese-Como, Italy |
| Qualification awarded | Postgraduate Doctorate (PhD) in Surgery and Surgical Biotechnologies |

MANUSCRIPTS

| 1. | Journal and Date | Ital Heart J Suppl. 2005;6(5):297-301 | |
|----|--------------------------------------|---|--|
| | Authors | Leva C, Mariscalco G, Bruno VD, Mantovani V, Musazzi A, Ferrarese S, Boscarini M, Sala A. | |
| | • Title | "Hybrid" management of aortic coarctation associated with atrioventricular valve regurgitation in the adult | |
| 2. | Journal and Date | Journal of Cardiovascular Surgery 2005;46:291-6 | |
| | Authors | Mantovani V, Mariscalco G, Borsani P, Tenconi S, Bruno VD, Leva C, Ferrarese S, Sala A. | |
| | • Title | Effects of adenosine and defibrotide adjunct to a standard crystalloid cardioplegic solution. | |
| 3. | Journal and Date | Texas Heart Institute Journal. 2005;32(4):583-5 | |
| | Authors | Mariscalco G, Blanzola C, Leva C, Bruno VD, Luvini M, Sala A. | |
| | • Title | 19-year patency of a coronary-coronary bypass graft | |
| 4. | Journal and Date | Journal of Cardiac Surgery 2006;21(1):77-80 | |
| | Authors | Borsani P, Mariscalco G, Blanzola C, Leva C, Bruno VD, Cozzi G, Casnedi S, Dainese E, Sala A. | |
| | • Title | Asymptomatic cardiac papillary fibroelastoma: diagnostic assessment and therapy. | |
| 5. | Journal and Date | Journal of Cardiac Surgery 2006;21(1):44-9 | |
| | • Authors • Title | Leva C, Mariscalco G, Ferrarese S, Bruno VD, Orrù A, Cattaneo P, Sala A. The Role of Zofenopril in myocardial protection during cardioplegic arrest: an Isolated rat heart model. | |
| 6. | Journal and Date | Texas Heart Institute Journal 2007;34:105-7 | |
| | Authors | Cattaneo P, Marchetti P, Bruno VD, Mariscalco G, Sala A | |
| | • Title | Color Doppler imaging of the ophthalmic artery during selective cerebral perfusion. | |
| 7. | Journal and Date | Journal of Cardiac Surgery 2007;22(5):379-84 | |
| | Authors | Cattaneo P, Bruno VD, Mariscalco G, Marchetti P, Ferrarese S, Salerno- Uriarte J, Sala A. | |
| | • Title | Early hemodynamic results of the Shelhigh SuperStentless aortic bioprostheses. | |
| 8. | Journal and Date | International Journal Of Cardiology. 2009; 133(3) e106-8 | |
| | Authors | Cattaneo P, Marchetti P, Baravelli M, Rossi A, Bruno VD, Anzà C. | |
| | • Title | Could left ventricular apical ballooning represent spontaneous myocardial infarction abortion? | |
| 9. | Journal and Date | Annals of Thoracic Surgery 2009;87:301-3 | |
| | Authors | Bruno VD, Batchelor TJP. | |
| | • Title | Late aortic injury: a rare complication of a posterior rib fracture. | |

| 10. | • Journal and Date • Authors • Title | Journal of Vascular Surgery 2010.51(4):993-9 Piffaretti G, Mariscalco G, Tozzi M, Bruno VD, Sala A, Castelli P. Acute iatrogenic type A aortic dissection following thoracic aortic endografting |
|-----|--|---|
| 11. | Journal and Date Authors Title | Journal of Cardiac Surgery 2010;25(2):198-205 Mariscalco G, Bruno VD, Borsani P, Dominici C, Sala A. Papillary fibroelastoma: insight to a primary cardiac valve tumor. |
| 12. | • Journal and Date • Authors • Title | Physiol Genomics 2010;42(1):67-75 Ghorbel MT, Cherif M, Mokhtari A, Bruno VD, Caputo M, Angelini GD. Off-pump coronary artery bypass surgery is associated with fewer gene expression changes in the human myocardium in comparison to on-pump surgery. |
| 13. | Journal and Date Authors | Angiology 2010;61(7):643 Mariscalco G, Sarzi Braga S, Banach M, Borsani P, Bruno VD, Napoleone M, Vitale C, Piffaretti G, Pedretti RF, Sala A. |
| | • Title | Preoperative n-3 polynsaturated fatty acids are associated with a decrease in the incidence of early atrial fibrillation following cardiac surgery |
| 14. | • Journal and Date • Authors • Title | Asian Cardiovasc Thorac Ann 2010.18(5):486-8 Bruno VD, Mariscalco G, Franzi F, Miceli A, Piffaretti G, Sala A. Ectopic congenital thymic cyst in the right pleural cavity. |
| 15. | • Journal and Date • Authors • Title | Texas Heart Institute Journal 2011. In press Bruno VD, Mariscalco G, De Vita S, Piffaretti G, Nassiacos D, Sala A. <i>Aortic valve papillary fibroelastoma a rare cause of angina</i> . |
| 16. | • Journal and Date • Authors • Title | Journal of Thoracic and Cardiovasc Surg 2011;141(3):771-6. Miceli A, Bruno VD, Capoun R, Romeo F, Angelini GD, Caputo M. Occult renal dysfunction: a mortality and morbidity risk factor in coronary artery bypass grafting surgery. |
| 17. | • Journal and Date • Authors • Title | Heart 2011; 97(5):362-5 Miceli A, Bruno VD, Capoun R, Duggan SR, Romeo F, Angelini GD, Caputo M. <i>Mild renal dysfunction in patients undergoing cardiac surgery as a new risk factor for</i> <i>EuroSCORE.</i> |
| 18. | Journal and Date Authors | Circulation Journal 2011, 75(12):2805-12. Mariscalco G, Bruno VD, Cottini M, Borsani P, Banach M, Piffaretti G, Dominici C, Beghi C, Sala A. |
| | • Title | Optimal timing of discontinuation of clopidogrel and risk of blood transfusion after coronary surgery – propensity score analysis. |
| | 19. • Book Chapter • Authors • Title | Chirurgia (di R. Dionigi, V Edition - 2011); Chapter 68; 1177- 92. Borsani P, Bruno VD, Sala A. <i>Valvulopatie acquisite.</i> |
| 20. | • Journal and Date • Authors • Title | Archives of Medical Sciences, 2014, 10(3):630-1. Bruno VD, Duggan SM, Capoun R, Ascione R. <i>Methamphetamine induced cardiomyopathy causing severe mitral valve regurgitation.</i> |

| 21. • Journal and Date • Authors | Journal of Cardiac Surgery, 2012, Nov;27(6):719. doi: 10.1111/jocs.12000 Shuckla R, Bruno VD, Aresu G, Ascione R. |
|-------------------------------------|---|
| • Title | Right Ventricular injury due to displaced sternal wire. |
| 22. • Journal and Date | Journal of Thoracic and Cardiovascular Surgery , 2016 Feb, in press |
| Authors | M. Zakkar, V.D. Bruno, G. Guida, G.D. Angelini, P. Chivasso, M.S. Suleiman, A.J. Bryan, R. Ascione. |
| • Title | Postoperative acute kidney injury defined by RIFLE predicts early health outcome and long-term survival in patients undergoing redo coronary artery bypass surgery. |

ABSTRACTS

| 1. | •Meeting | XXII National Congress of the Italian Society of Cardiac Surgery. Bologna 6-9 November 2004 |
|----|-----------------------------|--|
| | • Authors • Title | Cozzi G, Leva C,Mariscalco G, Bruno VD, Blanzola C, Mantovani V, Sala A Efficacy of cold blood cardioplegia in the preservation of right ventricular function. |
| 2. | Meeting | XXII National Congress of the Italian Society of Cardiac Surgery. Bologna 6-9 November 2004 |
| | Authors | Ferrarese S, Leva C, Bruno VD, Semeraro F, Blanzola C, Mariscalco G, SalaA. |
| | • Title | Shelhigh No-react aortic valve conduit: early hemodynamic and clinical results. |
| 3. | Meeting | 54 ESCVS International Congress. Athens, Greece. 19-22 May 2005 |
| | Authors | Mariscalco G, Ferrarese S, Bruno VD, Orrù A, Sala A. |
| | • Title | Shelhigh No-React aortic valve conduit: early hemodynamic and clinical results. |
| 4. | Meeting | XXIII National Congress of the Italian Society of Cardiac Surgery. Rome 2-5 December 2006 |
| | Authors | Ferrarese S, Mariscalco G, Bruno VD, Cantore C, Gandini E, Tozzi M, Musazzi A, Sala A. |
| | • Title | Neurological inflammation after coronary artery bypass surgery with leucocyte-depleting filtration |
| 5. | Meeting | 56 ESCVS International Annual Congress. Venice, Italy. 17-20 May 2007 |
| | Authors | Ferrarese S, Mariscalco G, Bruno VD, Musazzi AM, Mantovani V, Borsani P, Sala A. |
| | • Title | Hyperglicemia in diabetic and non-diabetic patients using buckberg solution cardioplegia. |
| 6. | Meeting | 56 ESCVS International Annual Congress. Venice, 17-20 May 2007 |
| | Authors | Mariscalco G, Ferrarese S, Bruno VD, Vanoli D, Cantore C, Sala A. |
| | • Title | Preoperative statins reduce atrial fibrillation following coronary artery surgery revascularization. |
| 7. | Meeting | 56 ESCVS International Annual Congress. Venice, 17-20 May 2007. |
| | Authors | Mariscalco G, Ferrarese S, Bruno VD, Canziani L, Borsani P, Mantovani V, Musazzi AM, Sala A. |
| | Title | Clinical features and follow-up after 25 years of cardiac myxoma surgery. |

| 8. | Meeting | XXV Meeting of the Society of Cardiac Surgeons. Pamplona, Spain. 21-23 June 2007. |
|-----|-----------------------------|---|
| | • Authors • Title | Ferrarese S, Mariscalco G, Bruno VD, Musazzi AM, Borsani P, Sala A. Hyperglycemia during cardiopulmonary bypass in diabetic and non-diabetic patients using different cardioplegic solutions. |
| | | |
| 9. | Meeting | 57 European Society Cardiovascular Surgery Annual Meeting. Barcelona, Spain. 24-27 April 2008 |
| | Authors | Borsani P, Mariscalco G, Ferrarese S, Scannapieco A, Napoleone M, Cantore C, Bruno VD, Sala A. |
| | • Title | 26-years experience of type A aortic dissection surgical treatment: long term results and analysis of the involved variable. |
| 10. | Meeting | 57 European Society Cardiovascular Surgery Annual Meeting. Barcelona, Spain. 24-27 April 2008 |
| | Authors | Mariscalco G, Borsani P, Ferrarese S, Zanobini M, Bruno VD, Cantore C, Cozzi GP, Sala A. |
| | • Title | Atrial fibrillation after coronary artery bypass grafting surgery reduces late post-operative survival. |
| 11. | Meeting | XXIV National Meeting of the Italian Society for Cardiac Surgery, Rome 8-11 November 2008. |
| | Authors | Bruno VD (Speaker), Ascione R |
| | • Title | An effective, simple reproducible and inexpensive novel approach to mitral valve remodeling annuloplasty. |
| 12. | Meeting | Heart Failure 2009. Nice 30 May – 2 June 2009. |
| | Authors | Ghorbel MT, Cherif M, Mokhtari A, Bruno VD, Angelini GD, Caputo M. |
| | • Title | Coronary artery bypass surgery causes genomic changes in the human myocardium that are ameliorated by off-pump surgery. |
| 13. | Meeting | 1 European Meeting of Young Surgeons, Rome 19-21 June 2009. |
| | Authors | Miceli A, Bruno VD, Fiorani B, Moktahri A, Bogdan C, Capoun R, Narayan P, Romeo F, Angelini GD, Caputo M. |
| | • Title | A clinical score to identify high risk patients undergoing CABG who may benefit from elective use of IABP. |
| 14. | Meeting | 1 European Meeting of Young Surgeons, Rome 19-21 June 2009 |
| | Authors | Bruno VD (Speaker), Miceli A, Ray D, Capoun R, Ascione R |
| | • Title | A novel and simple approach to remodeling annuloplasty for degenerative disease. |
| 15. | Meeting | American Heart Association annual meeting. Orlando, Florida 14-18 November 2009 |
| | • Authors • Title | Miceli A, Bruno VD, Caputo M, Angelini GD. Occult renal dysfunction: a mortality risk factor in patients undergoing coronary artery bypass grafting. |
| 16. | Meeting | 59 ESCVS Congress. Izmir , Turkey. 15-18 April 2010 |
| | Authors | Piffaretti G, Mariscalco G, Tozzi M, Rivolta N, Borsani P, Bruno VD (Speaker), Castelli P, Sala A. |
| | • Title | Predictive factors for complications following surgical repair of iatrogenic femoral pseudoaneusysms |
| | | |

| 17. | MeetingAuthors | 59 ESCVS Congress. Izmir , Turkey. 15-18 April 2010 Ferrarese S, Vigetti D, Mariscalco G, Cantore C, Beltrami A, Clerici M, Bruno VD, Sala A. |
|-----|---|---|
| | • Title | Leukocite filtration effect on neurological inflammation after on-pump coronary surgery. |
| 18. | Meeting | XXV SICCH National Congress. Rome, Italy 6-9 November 2010 |
| | Authors | Mariscalco G, Beghi C, Nicolini F, Rubino A, Gherli R, Bruno VD, Piffaretti G, Renzulli A, Gherli T, Sala A. |
| | • Title | Cerebrovascular accidents after aortic root replacement for ascending aortic aneurysms. |
| 19. | Meeting | XXV SICCH National Congress. Rome, Italy 6-9 November 2010 |
| | • Authors • Title | Bruno VD (Speaker), Mariscalco G, Piffaretti G, Cottini M, Braho O, Musazzi A, Sala A. Early outcome after coronary artery bypass grafting with mini-extracorporeal circulation. |
| 20. | Meeting | 60 ESCVS International Congress, Moscow, Russia 20-22 May 2011 |
| | Authors | Borsani P, Mariscalco G, Tenconi S, Cottini M, Bruno VD , Piffaretti G, Dominici C, Sala A. |
| | • Title | Clopidogrel and bleeding in Cardiac Surgery. |
| 21. | Meeting | National Joint Congress of the Swiss Society for Cardiology and Swiss Society for Cardiac Surgery, Lugano, Switzerland 12-14 June 2014 |
| | Authors | Franciosi G, Torre T, Trunfio R, Cianci V, Bruno VD, Demertzis S, Siclari F. |
| | • Title | Surgical treatment of native and prosthetic valve endocarditis, outcomes and survival. |
| 22. | Meeting | European Society of Cardiology Annual Meeting, Amsterdam, The Netherlands 31 August-4 September 2013. |
| | • Authors • Title | Bruno VD(Presenter), Zebele C, Chivasso P, Sedmakov H, Ascione R. Pericardial versus artificial ring remodeling annuloplasty for surgical repair of degenerative valve disease: a propensity score analysis. |
| 23. | Meeting | 27th EACTS Annual Meeting, Vienna, Austria 5-9 October 2013. |
| | Authors | Zebele C, Chivasso P, Bruno VD, Sedmakov C, Angelini GD, Caputo M, Parry A, Stoica S. |
| | • Title | The Ross operation in children and young adults: 11-years results and trends from the United Kingdom national database. |
| 24. | Meeting | National Joint Congress of the Swiss Society for Cardiology and Swiss Society for Cardiac Surgery, Interlaken, Switzerland 11-13 June 2014 . |
| | • Authors • Title | Bruno VD(Presenter), Cenci F, Torre TM, Trunfio R, Clerici A, Franciosi G, Demertzis S, Siclari F. Effect of Cardiac Catheterization Timing on Postoperative renal failure in patients undergoing on-pump coronary artery bypass grafting (Best Abstract for Cardiac Surgery) |
| 25. | Meeting | National Joint Congress of the Swiss Society for Cardiology and Swiss Society for Cardiac Surgery, Interlaken, Switzerland 11-13 June 2014. |
| | Authors | Demertzis S, Torre TM, Bruno VD, Siclari F, Trunfio R. |
| | • Title | Multivessel minimally invasive coronary artery bypass grafting: The quest of the proximal anastomosis. |
| 26. | Meeting | National Joint Congress of the Swiss Society for Cardiology and Swiss Society for Cardiac Surgery, Interlaken, Switzerland 11-13 June 2014 |
| | Authors | Torre TM, Bruno VD, Trunfio R, Cenci F, Franciosi G, Demertzis S, Siclari F. |
| | Title | Long-term of minimally invasive open heart surgery. |

| 27. | • Meeting • Authors • Title | Heart Rhythm 2015, Boston 13-16 May, 2015 Frontera A, Breitenstein A, Panikker S, Connelly GM, Bruno VD, Rio T, Dhinoja M, Hussain W, Schilling RJ, Thomas G, Wong T, Hunter R, Duncan E. Safety and outcome of catheter ablation of ventricular tachycardia in octogenarians. |
|-----|-----------------------------------|---|
| 28. | • Meeting • Authors • Title | SCTS Annual Meeting 2016, Birmingham 12-15 March 2016 Chivasso P, Bruno VD, Marsico R, Annaiah A, Bryan AJ, Angelini GD, Rajakaruna C. Use of Aprotinin in thoracic aortic surgery: effectiveness and safety. |
| 29. | • Meeting • Authors • Title | SCTS Annual Meeting 2016, Birmingham 12-15 March 2016 V D Bruno; M Zakkar; G Guida; F Rapetto; A J Bryan; R. Ascione; Early and long term outcome following redo off-pump coronary artery bypass surgery. |

Award

| Award | Best Cardiac Surgery Abstract |
|-----------------------------|--|
| Meeting | Swiss Society for Cardiac Surgery and Thoracic Vascular Surgery National Congress Interlaken (CH), June 11 – 13, 2014. |
| Title | Effect of Cardiac Catheterization Timing on Postoperative renal failure in patients undergoing on-pump coronary artery bypass grafting. |
| Author | Bruno VD , Cenci F, Torre TM, Trunfio R, Clerici A, Franciosi G, Demertzis S, Siclari F. |

CLINICAL AUDIT

| •Organization • Audit Title | University Hospital of Bristol Effect of Aprotinin on early and long term outcome in adult patients undergoing congenital heart surgery |
|--|---|
| Date | 21.11.2012 |
| •Organization • Audit Title Date | University Hospital of Bristol Early and long term outcome of mitral valve surgical procedures in adult patients. 12.12.2013 |

Membership

| •Society • Working Group Year | European Society of Cardiology Working Group on Cardiovascular Surgery 2013 |
|-------------------------------------|--|
| •Society | European Society of Cardiology |
| Working Group | Working Group on Valvular Heart Disease |
| Year | 2013 |
| •Society | Schweizerische Gesellshaft für Herz und thorakale Gefässchirurgie Swiss Society for Cardiac and Thoracic Vascular Surgery |
| Membership | 2013 |
| Society | European Association for Cardio-Thoracic Surgery |
| Membership | 2015 |

MOTHER TONGUE Italian

OTHER LANGUAGES

English Excellent

- Reading skills
 Writing skills
- Excellent
- Verbal skills Excellent

TECHNICAL SKILLS AND I.T. COMPETENCES

Operative systems:

- Windows
- Linux
- Mac OS

Office Suites:

- MS Excel
- MS Access
- MS Word
- MS Power Point
- OpenOffice

Statistical Software:

- SPSS: knowledge and use of the main Statistical Packages
- R : knowledge and use of the main Statistical Packages

Statistic courses:

- SPSS Scientific Research Statistical Analysis SRS1- 2006
- SPSS Scientific Research Statistical Analysis SRS2 2007
- Introduction to regression in R. University College of London- Institute of Child Health. London 17-18 February 2016.