

CURRICULUM VITAE

NAME De Bruyne
SURNAME Bernard
NATIONALITY Belgian
PLACE & DATE of BIRTH Leuven, 09-02-1957
MARITAL STATUS Married with Françoise Van den Schrieck
CHILDREN Geraldine ('83), Aurélie ('85), Martin ('89), Segolène ('92)

ADDRESS

Home: 11, Bosduivenlaan
B-1950 Kraainem - Belgium
Tel: +32 -2-78 2 21 02

Office (1): Cardiovascular-Center
O.L.V. Ziekenhuis
164, Moorselbaan
B-9300 Aalst - Belgium
Tel : +32-53-72 44 47
Fax : +32- 53-72 45 50
E-mail:bernard.de.bruyne@olvz-aalst.be

PRESENT POSITION

- Co-Director Cardiovascular Center Aalst
- Co-Director Catheterization laboratory
- Director Echocardiography Laboratory

EDUCATION:

- Primary School: St. Jan School, Leuven, Belgium
- High School: - Jozefieten Kollege, Leuven, Belgium
 - Collège Notre-Dame, Basse-Wavre, Belgium
- University: - Université Catholique de Louvain BS: Medical Sciences 1974-1977
 - Université Catholique de Louvain: Medical Degree 1977-1981
 - Medical Internship: UCL 1981-1985

POSTGRADUATE TRAINING:

- Residency in Cardiology: University of Geneva 1985-1987

CERTIFICATES:

- Medical Degree 1981
- Certificate of Internal Medicine and Cardiology UCL, 1986
- Certificate of the Canadian Council, 1985
- PhD. ("Agrégé de l'enseignement supérieur") UCL 1995. (PhD thesis: Coronary Pressure: From a Physiological Index to a Clinical Tool)

PROFESSIONAL SOCIETIES

- European Society of Cardiology: Working group on Coronary Circulation
- European Society of Cardiology: Working Group on Myocardial Function
- Treasurer of the Belgian Working Group on Interventional Cardiology

AWARD and GRANT AWARD

- Young Investigator's Award of the Belgian Society of Cardiology, Brussels, 1993
- Bekales Foundation Award 1994: Myocardial fractional flow reserve in humans: Relation with exercise-induced ischemia

REVIEWER

- European Heart Journal of Cardiology.
- Catheterization and Cardiovascular Diagnosis.
- Heart.
- Circulation.
- Journal of the American College of Cardiology.
- European Journal of Echocardiography.
- American Heart Journal

PUBLICATIONS

A/ Monography

1. Pijls NHJ, De Bruyne B. Coronary Pressure. Kluwer Academic Publishers 1997
2. Pijls NHJ, De Bruyne B. Coronary Pressure. Second Edition. Kluwer Academic Publishers, 1999.

B/ Articles in peer-reviewed journals

1. De Bruyne B, Bernard P. Détermination de la pression capillaire pulmonaire par méthode échographique TM. Arch Mal Coeur 1985; 13:1920-1925
2. Marchandise B, De Bruyne B, Delaunois L, Kremer R. Noninvasive prediction of pulmonary hypertension in chronic obstructive lung disease by Doppler echocardiography. Chest 1987; 91:361-365
3. Melchior JP, Chevigne M, Righetti A, De Bruyne B, Salembier JP, Barthelemy JC, Marchandise B. Quantification of valvular regurgitation by cardiac blood pool scintigraphy : Correlation with catheterization. Eur Heart J 1987; 8:261-266
4. De Bruyne B, Dugernier T, Goncette L, Otte JB, Reynaert M, Col J. Hydropneumopericardium with tamponade as a late complication of surgical repair of hiatus hernia. Am Heart J 1987; 114:444-446
5. De Bruyne B, Marchandise B, Kremer R. Apical hypertrophic cardiomyopathy of the " Japanese type" in the Western Countries. Am J Med. 1987 May;82(5):1087-8.
6. Finci L, von Segesser L, Meier B, De Bruyne B, et al. Comparison of multivessel coronary angioplasty with surgical revascularisation using both internal mammary arteries. Circulation 1987; 76 (suppl.III):414-419
7. Urban P, Meier B, Finci L, De Bruyne B, Rutishauser W. Coronary wedge pressure: a predictor of restenosis after balloon angioplasty. J Am Coll Cardiol 1987; 10:504-509
8. Finci, Meier B, De Bruyne B, Steffenino GD, Divernois J, Rutishauser W. Angiographic follow-up after multivessel percutaneous coronary angioplasty. Am J Cardiol 1987; 60:467-470
9. Finci L, Meier B, De Bruyne B, Steffenino GD, Rutishauser W. Changes in indication for coronary angiography over a decade. Schweiz Med Wschr 1987; 117:1213-1216
10. De Bruyne B, Dorsaz PA, Doriot PA, Meier B, Rutishauser W. Assessment of regional coronary flow reserve by digital angiography in patients with coronary artery disease. Int J Cardiac Imaging 1987; 3:47-55
11. Meier B, Finci L, De Bruyne B, Divernois J, Rutishauser W. L'angioplastie coronaire percutanée (ACP) dans le traitement de l'angor instable et de l'infarctus aigu. Schweiz Med Wschr 1987; 117:1648-1654
12. De Bruyne B, Meier B, Finci L, Urban P, Rutishauser W, Protective role of coronary collateral circulation after coronary artery occlusion : assessment by collateral wedge pressure. Circulation 1988; 78:566-572

13. De Bruyne B, Lerch R, Meier B, Gabathuler J, Finci L, Schlaepfer H, Rutishauser W. Doppler assessment of changes in left ventricular filling during brief coronary occlusion. *Am Heart J* 1989; 117:629-635
14. De Bruyne B, Renkin J, Col J, Wijns W. Left coronary artery angioplasty in patients with prior occlusion of the right coronary artery : clinical and functional efficacy. *Am Heart J* 1991; 122:415-422
15. Bernard De Bruyne , Jean Renkin , Jacques Col and William Wijns. Percutaneous transluminal coronary angioplasty of the left coronary artery in patients with chronic occlusion of the right coronary artery: Clinical and functional results; *American Heart Journal*, Volume 122, Issue 2, August 1991, Pages 415-422
16. Renkin J, De Bruyne B, Benit E, Joris JM, Carlier M, Col J. Cardiac tamponade early after thrombolysis for acute myocardial infarction: A rare but not reported hemorrhagic complication. *J Am Coll Cardiol* 1991; 17:280-285
17. Bronzwaer JGF, De Bruyne B, Ascoop CAPL, Paulus WJ. Comparative effects of pacing-induced and balloon coronary occlusion ischemia on left ventricular function in man. *Circulation* 1991; 84:211-222
18. De Bruyne B, Bronzwaer JGF, Heyndrickx GR, Paulus WJ. Comparative effects of ischemia and hypoxemia on left ventricular systolic and diastolic function in man. *Circulation* 1993; 88:461-471
19. De Bruyne B, Sys SU, Heyndrickx GR. Percutaneous transluminal angioplasty catheters versus fluid-filled pressure monitoring guide wires for coronary pressure measurements and correlation with quantitative coronary angiography. *Am J Cardiol* 1993; 72:1101-1106
20. Pijls NHJ, van Son JAM, Kirkeeide RL, De Bruyne B, Gould B. Experimental basis of determining maximum coronary, myocardial, and collateral blood flow by pressure measurements for assessing functional stenosis severity before and after percutaneous transluminal coronary angioplasty. *Circulation* 1993; 86:1354-1367
21. De Bruyne B, Pijls NHJ, Paulus WJ, Vantrimpont PJ, Sys SU, Heyndrickx GR. Transstenotic coronary pressure gradient measurements in humans: In vitro and in vivo evaluation of a new pressure monitoring angioplasty guide wire. *J Am Coll Cardiol* 1993; 22:119-126
22. De Bruyne B, Bronzwaer JGF, Heyndrickx GR, Paulus WJ. Comparative effects of ischemia and hypoxemia on left ventricular systolic and diastolic function in humans. *Circulation* 1993; 88:461-471
23. De Bruyne B, Baudhuin T, Melin JA, Pijls NHJ, Sys SU, Bol A, Paulus WJ, Heyndrickx GR, Wijns W. Coronary flow reserve calculated from pressure measurements in humans. Validation with positron emission tomography. *Circulation* 1994; 89:1013-1022
24. Bartunek J, Vantrimpont PJ, De Bruyne B. Left atrial volume determination by echocardiography. Validation by biplane angiography in the setting of mitral balloon valvuloplasty. *Int J Cardiac Imaging* 1994; 10:263-268
25. Uren NG, Melin JA, De Bruyne B, Wijns W, Baudhuin T, Camici P. Myocardial blood flow as a function of coronary stenosis in man. *New Engl J Med* 1994; 330:1782-1788

26. De Bruyne B, Paulus WJ, Pijls NHJ. Rationale and applications of coronary transstenotic pressure gradient measurements. *Cath and Cardiovasc Diagn* 1994; 33:250-261
27. De Bruyne B, Stockbroeckx J, Demoor D, Heyndrickx GR, Kern MJ. Interventional physiology. Part XIX. Role of side holes in guiding catheters: observations on coronary pressure and flow. *Cath and Cardiovasc Diagn* 1994; 33:145-162
28. De Bruyne B, Pijls NHJ. Coronary pressure measurements. *Primary Cardiology* 1995; 21:5,28-32
29. Jozef Bartunek, Dirk De Bacquer, Ana Clara Rodrigues, Bernard De Bruyne. Accuracy of aortic stenosis severity assessment by doppler echocardiography: importance of image quality. *International Journal of Card Imaging* 1995; 11:97-104
30. Ana Clara Tude Rodrigues, Ann de Vylder, Francis Wellens, Jozef Bartunek, Bernard De Bruyne. Right ventricular pseudoaneurysm as a complication of endomyocardial biopsy after heart transplantation. *Chest* 1995; 107:566-567
31. Bartunek J., Sys S., Heyndrickx G.R., Pijls N., De Bruyne B. : Quantitative Coronary Angiography in Predicting Functional Significance of Stenoses in an Unselected Patient Population. *J Am Coll Cardiol* 1995; 26:328-334
32. Bernard De Bruyne, Jozef Bartunek, Stanislas U Sys, Guy R Heyndrickx. Relation Between Myocardial Fractional Flow Reserve Calculated From Coronary Pressure Measurements and Exercise-Induced Myocardial ischemia. *Circulation* 1995; 92:39-46
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Velocities after Valve Replacement for Aortic Stenosis: Mechanisms, Predictive Factors, and Prognostic Significance. *Circulation* 1996; 93:712-719

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47. Bernard De Bruyne, Jozef Bartunek, Stanislas U. Sys, Guy R. Heyndrickx, William Wijns, Nico H.J. Pijls. Plaque sealing or plumbing for coronary artery stenoses? *Circulation* 1997; 96:2094-2095 (letter)
48. Peter Geelen, Marc Goethals, Bernard de Bruyne, Pedro Brugada. A prospective hemodynamic evaluation of patients with chronic atrial fibrillation undergoing radiofrequency catheter ablation of the atrioventricular junction. *Am J Cardiol* 1997;80:1606-1609
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51. G. Jan Willem Bech, Bernard De Bruyne, Jozef Bartunek, Hans J.R.M. Bonnier, William Wijns, Guy R. Heyndrickx, Jacques J. Koolen, Nico H.J. Pijls. Long-term follow-up after deferral of PTCA of intermediated stenosis on the basis of coronary pressure measurement. *JACC* 1998;31:841-847.
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62. Pijls NH, De Bruyne B, Bech GJ, Liistro F, Heyndrickx GR, Bonnier HJ, Koolen JJ. Coronary pressure measurement to assess the hemodynamic significance of serial stenoses within one coronary artery : validation in humans. *Circulation* 2000 Nov 7;102(19):2371-7

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Value of fractional flow reserve in making decisions about bypass surgery for equivocal left main coronary artery disease. *Heart*. 2001 Nov;86(5):547-52.
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coronary blood flow velocity reserve. A subanalysis of the DEBATE study. Doppler Endpoints Balloon Angioplasty Trial Europe. Eur Heart J. 2001 Sep;22(18):1725-32.

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