

Curriculum Vitae

Name

Prof. Dr. med. Christian Buske

Date of Birth

26.8.1965



Address (institutional address):

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Current Position:

Director of the Institute of Experimental Cancer Research & Attending Physician and Professor of Medicine at the Medical Department for Internal Medicine III, Hematology/Oncology, University Hospital Ulm

University Education

From - to	University	Subject	Degree
10/85 – 4/92	WWU Münster	Medicine	M.D.

Graduate Work / Thesis

From - to	University	Subject / Title	Mentor
11/1993	WWU Münster	Studien zur Regulation des Wachstums menschlicher Prä-B Zellen durch Knochenmarkstromazellen: Etablierung eines <i>in vitro</i> Modelles	Prof. Dr. W. Hiddemann

Board Certifications (Facharztanerkennungen etc.): FMGEMS (1/1991) ; Internal Medicine (3/2003) ; Hematology/Oncology (8/2004)

Scientific Training : Terry Fox Laboratory, Prof. RK Humphries, Vancouver, Canada (1998 – 2001)

Professional Positions

From - to	Place	Position
6/1992 - 5/1997	University Hospital Göttingen,	Clinical Fellowship
4/1998 – 7/1998	University Hospital Göttingen,	Clinical Fellowship
7/1998 – 3/2001	BCCA Vancouver, Canada	Postdoctoral research position
3/2001 – 7/2004	LMU München, Hematology/ Oncology, Klinikum Großhadern	Clinical Fellowship
Since 11/2003	LMU München, Hematology/ Oncology, Klinikum Großhadern	Assistant Professorship
Since 8/2004	LMU München, Hematology/ Oncology, Klinikum Großhadern	Attending physician at the Dept. of Medicine III
Since 8/2008	LMU München	Professor of Internal Medicine
Since 7/2009	University Ulm	Director, Institute of Experi- mental Cancer Research & Attending Physician at the Dept. of Internal Medicine III

Awards / Scholarships:

1. *Stipend, Studienstiftung des Deutschen Volkes', 1987-1992*
2. *Postdoctoral fellowship of German Research Council (DFG), 1998 - 2000*
3. *First Prize Young Investigator Award: 29st Annual Meeting of the International Society for Experimental Hematology (ISEH), 2000*
4. *Canadian Research Award 2000*

2. Scientific focus:

Molecular basis of malignant transformation and factors of susceptibility in leukemogenesis

Secondary genetic alterations and in the development of leukemia and lymphoma

Innovative therapeutical approaches for leukemia and indolent lymphoma (including radioactively labelled antibodies)

Publications in numerous internationally recognized haematological journals

Memberships:

- ASH, ESMO, ISEH, EHA, DGHO, DGIM

Editorial Boards:

- Leukemia, Experimental Hematology

Review activity (journals):

Science, Cancer Cell, JCI, Blood, Oncogene, Molecular Medicine, Stem Cells, Leukemia, Plos One

Publications (journals, selection):

Cancer Cell, JCI, JEM, PNAS, Nature Medicine, Blood, JCO, Leukemia

Other academic activities

- Presentations as guest speaker (including conferences, presentations, demonstrations, workshops intended for a non-academic audience, according to the type of audience). Invitation to about 100 talks for a academic audience in the last 5 years.
- There are more than 100 abstracts published at different meetings in the last five year with me as author.

Reference List / Publications:

1. Buske C, Hoster E, Dreyling M, Hasford J, Unterhalt M, Hiddemann W. The Follicular Lymphoma International Prognostic Index (FLIPI) separates high-risk from intermediate- or low-risk patients with advanced-stage follicular lymphoma treated front-line with rituximab and the combination of cyclophosphamide, doxorubicin, vincristine, and prednisone (R-CHOP) with respect to treatment outcome. *Blood*. 2006;108:1504-1508.
2. *Deshpande AJ, Cusan M, Rawat VP, Reuter H, Krause A, Pott C, Quintanilla-Martinez L, Kakadia P, Kuchenbauer F, Ahmed F, Delabesse E, Hahn M, Lichter P, Kneba M, Hiddemann W, Macintyre E, Mecucci C, Ludwig WD, Humphries RK, Bohlander SK, Feuring-Buske M, Buske C. Acute myeloid leukemia is propagated by a leukemic stem cell with lymphoid characteristics in a mouse model of CALM/AF10-positive leukemia. *Cancer Cell*. 2006;10:363-374.
3. Ahmed F, Arseni N, Glimm H, Hiddemann W, Buske C, Feuring-Buske M. Constitutive expression of the ABC transporter ABCG2 enhances the growth potential of early human progenitors. *Stem Cells*, 2008; 26:810-8.
4. *Rawat VP, Thoene S, Naidu VM, Arseni N, Heilmeier B, Metzeler K, Petropoulos K, Deshpande A, Quintanilla-Martinez L, Bohlander SK, Spiekermann K, Hiddemann W, Feuring-Buske M, Buske C. Overexpression of CDX2 perturbs HOX gene expression in

murine progenitors depending on its N-terminal domain and is closely correlated with deregulated HOX gene expression in human acute myeloid leukemia. **Blood**, 2008; 111:309-319

5. *Petropoulos K, Arseni N, Schessl C, Stadler CR, Rawat VPS, Deshpande AJ, Heilmeier B, Hiddemann W, Quintanilla-Martinez L, Bohlander SK, Feuring-Buske M, Buske C. A novel role for Lef-1 as a central transcription mediator of Wnt signalling in leukemogenesis. **JEM**, 2008; 17;205:515-22.
6. Metzeler KH, Hummel M, Bloomfield CD, Spiekermann K, Braess J, Sauerland M-C, Heinecke A, Radmacher M, Marcucci G, Whitman SP, Maharry K, Paschka P, Larson RA, Berdel WE, Büchner T, Wörmann B, Mansmann U, Hiddemann W, Bohlander SK*, Buske C*. An 86 probe set gene expression signature predicts survival in cytogenetically normal acute myeloid leukemia. **Blood**, 2008, 112(10):4193-201 (*both authors contributed equally)
7. *Thoene S, Rawat VPS, Heilmeier B, Hoster E, Metzeler KH, Herold T, Hiddemann W, Gökbüget N, Hoelzer D, Bohlander SK, Feuring-Buske M, Buske C. The homeobox gene *CDX2* is aberrantly expressed and associated with an inferior prognosis in patients with acute lymphoblastic leukemia. **Leukemia**, 2009, 23(4):649 - 655
8. Metzeler KH, Dufour A, Benthaus T, Hummel M, Sauerland M-C, Heinecke A, Berdel WE, Büchner T, Wörmann B, Mansmann U, Braess J, Spiekermann K, Hiddemann W, Buske C*, Bohlander SK*. *ERG* expression is an independent prognostic factor and allows refined risk stratification in cytogenetically normal acute myeloid leukemia: A comprehensive analysis of *ERG*, *MN1* and *BAALC* transcript levels using oligonucleotide microarrays. **JCO**, 2009, 27 (30): 5031 - 5038 (*both authors contributed equally)
9. Rawat VP, Arseni N, Ahmed F, Mulaw MA, Thoene S, Heilmeier B, Sadlon T, D'Andrea RJ, Hiddemann W, Bohlander SK, Buske C, Feuring-Buske M. The vent-like homeobox gene *VENTX* promotes human myeloid differentiation and is highly expressed in acute myeloid leukemia. **Proc Natl Acad Sci U S A**. 2010, 107(39):16946-51.
10. Mohr F, Döhner K, Buske C, Rawat VPS. TET genes: New players in DNA demethylation and important determinants for stemness. **Exp Hematol** 2011; 39 (3): 272 - 281.
11. Eppert K, Takenaka K, Lechman ER, Waldron L, Nilsson B, van Galen P, Metzeler KH, Poepl A, Ling V, Beyene J, Cauty AJ, Danska JS, Bohlander SK, Buske C, Minden MD, Golub TR, Jurisica I, Ebert BL, Dick JE. Stem cell gene expression programs influence clinical outcome in human leukemia. **Nat Med**. 2011, 17(9):1086-1093.
12. Kuchenbauer F, Mah SM, Heuser M, McPherson A, Rüschemann J, Rouhi A, Berg T, Bullinger L, Argiropoulos B, Morin RD, Lai D, Starczynowski DT, Karsan A, Eaves CJ, Watahiki A, Wang Y, Aparicio SA, Ganser A, Krauter J, Döhner H, Döhner K, Marra MA, Camargo FD, Palmqvist L, Buske C, Humphries RK. Comprehensive analysis of mammalian miRNA* species and their role in myeloid cells. **Blood**, 2011, 118(12), 3350 - 3358.
13. Deshpande AJ, Rouhi A, Lin Y, Stadler C, Greif PA, Arseni N, Opatz S, Quintanilla-Fend L, Holzmann K, Hiddemann W, Döhner K, Döhner H, Xu G, Armstrong CA, Bohlander SK, Buske C. The clathrin binding domain of CALM and OM-LZ domain of AF10 are sufficient to induce acute myeloid leukemia in mice. **Leukemia**, 2011, 153, 1718 - 1727.

14. Herold T, Jurinovic V, Mulaw M, Seiler T, Dufour A, Schneider S, Kakadia PM, Feuring-Buske M, Braess J, Spiekermann K, Mansmann U, Hiddemann W, Buske C, Bohlander SK. Expression analysis of genes located in the minimally deleted regions of 13q14 and 11q22-23 in chronic lymphocytic leukemia-unexpected expression pattern of the RHO GTPase activator ARHGAP20. **Leukemia**, 50/7, 546-558.
17. Herold T, Jurinovic V, Metzeler KH, Boulesteix AL, Bergmann M, Seiler T, Mulaw M, Thoene S, Dufour A, Pasalic C, Schmidberger M, Schmidt M, Schneider S, Kakadia PM, Feuring-Buske M, Braess J, Spiekermann K, Mansmann U, Hiddemann W, Buske C, Bohlander SK. An 8 gene expression signature for the prediction of survival and time to treatment in chronic lymphocytic leukemia. **Leukemia**, 2011, 25(10):1639-1645.
18. Mohr F, Döhner K, Buske C, Rawat VP. TET genes: New players in DNA demethylation and important determinants for stemness. **Exp Hematol** 2011; 39: 272-281.
19. Eppert K, Takenaka K, Lechman ER, Waldron L, Nilsson B, van Galen P, Metzeler KH, Poepl A, Ling V, Beyene J, Canty AJ, Danska JS, Bohlander SK, Buske C, Minden MD, Golub TR, Jurisica I, Ebert BL, Dick JE. Stem cell gene expression programs influence clinical outcome in human leukemia. **Nature Medicine** 2011; 17: 1086-1093.
20. Kuchenbauer F, Mah SM, Heuser M, et al. Comprehensive analysis of mammalian miRNA* species and their role in myeloid cells. **Blood** 2011; 118(12): 3350-3358.
21. Rouhi A, Buske C. Stem cells and beyond: report on the 40th Annual Scientific Meeting of the International Society of Experimental Hematology. **Expert Rev Hematol** 2011; 4(6): 591-592.
22. Deshpande AJ, Rouhi A, Lin Y, Stadler C, Greif PA, Arseni N, Opatz S, Quintanilla-Fend L, Holzmann K, Hiddemann W, Dohner K, Dohner H, Xu G, Armstrong SA, Bohlander SK, Buske C. The clathrin binding domain of CALM and OM-LZ domain of AF10 are sufficient to induce acute myeloid leukemia in mice. **Leukemia** 2011; 25(11): 1718-1727.
23. Azimzadeh O, Scherthan H, Sarioglu H, Barjaktarovic Z, Conrad M, Vogt A, Calzada-Wack J, Neff F, Aubele M, Buske C, Atkinson MJ, Tapio S. Rapid proteomic remodeling of cardiac tissue caused by total body ionizing radiation. **J Proteomics** 2011 11: 3299-3311.
24. Herold T, Jurinovic V, Mulaw M, Seiler T, Dufour A, Schneider S, Kakadia PM, Feuring-Buske M, Braess J, Spiekermann K, Mansmann U, Hiddemann W, Buske C, Bohlander SK. Expression analysis of genes located in the minimally deleted regions of 13q14 and 11q22-23 in chronic lymphocytic leukemia-unexpected expression pattern of the RHO GTPase activator ARHGAP20. **Genes Chromosomes Center** 2011; 50: 546-558.
25. Herold T, Jurinovic V, Metzeler KH, Boulesteix AL, Bergmann M, Seiler T, Mulaw M, Thoene S, Dufour A, Pasalic Z, Schmidberger M, Schmidt M, Schneider S, Kakadia PM, Feuring-Buske M, Braess J, Spiekermann K, Mansmann U, Hiddemann W, Buske C, Bohlander SK. An 8 gene expression signature for the prediction of survival and time to treatment in chronic lymphocytic leukemia. **Leukemia** 2011; 25: 1639-1645.
26. Metzeler KH, Heilmeier B, Edmaier KE, Rawat VPS, Dufour A, Doehner K, Feuring-Buske M, Braess J, Spiekermann K, Buchener T, Sauerland MC, Doehner H, Hiddemann W, Bohlander SK, Schlenk RF, Bullinger L, Buske C. High expression of lymphoid enhancer-binding factor-1 (LEF1) is a novel favorable prognostic factor in cytogenetically normal acute myeloid leukemia. **Blood** 2012 (in press).

27. Mulaw MA, Krause AJ, Deshpande AJ, Krause LF, Rouhi A, La Starza R, Borkhardt A, Buske C, Mecucci C, Ludwig WD, Lottaz C, Bohlander SK. CALM/AF10-positive leukemias show upregulation of genes involved in chromatin assembly and DNA repair processes and of genes adjacent to the breakpoint at 10p12. **Leukemia**. 2012 May; 26(5): 1012 - 1019.
28. Mantelzell- Lymphom. Dreyling M, Herold T, Drach J, Rummel M, Buske C. Onkopedia-DGHO, März 2012.
29. Schneider F, Hoster E, Unterhalt M, Schneider S, Dufour A, Benthaus T, Mellert G, Zellmeier E, Kakadia PM, Bohlander SK, Feuring-Buske M, Buske C, Braess J, Heinecke A, Sauerland MC, Berdel WE, Buechner T, Woermann BJ, Hiddemann W, Spiekermann K. The FLT3ITD level has a high prognostic impact in NPM1 mutated, but not NPM1 unmutated AML with a normal karyotype. **Blood**. 2012 119: 4383-4386.
30. Rawat VP, Humphries RK, Buske C. Beyond HOX: the role of ParaHOX genes in normal and malignannt hematopoiesis. **Blood**. 2012 Apr 30. [Epub ahead of print]
31. Grasedieck S, Schöler N, Bommer M, Niess JH, Tumani H, Rouhi A, Bloehdorn J, Liebisch P, Mertens D, Döhner H, Buske C, Langer C, Kuchenbauer F. Impact of serum storage conditions on microRNA stability. **Leukemia**. 2012 Apr 16 (in press).
32. Schneider F, Hoster E, Schneider S, Dufour A, Benthaus T, Kakadia PM, Bohlander SK, Braess J, Heinecke A, Sauerland MC, Bergel WE, Buechner T, Woermann BJ, Feuring-Buske M, Buske C, Creutzig U, Thiede C, Zwaan MC, van den Heuvel-Eibrink MM, Reinhardt D, Hiddemann W, Spiekermann K. Age-dependent frequencies of NPM1 mutations and FLT3-ITD in patients with normal karyotype AML (NK-AML). **Ann Hematol** 2012; 91: 9-18.
33. Azimzadeh O, Scherthan H, Yentrapalli R, Barjaktarovic Z, Ueffing M, Conrad M, Neff F, Calzada-Wack J, Aubele M, Buske C, Atkinson MJ, Hauck SM, Tapio S. Label-free protein profiling of formalin fixed paraffin-embedded (FFPE) heart tissue reveals immediate mitochondrial impairment after ionising radiation. **J Proteomics**. 2012 Apr 18;75(8):2384-95.