

**Research Focus**

Development and validation of laboratory methods in clinical endocrinology (focus pituitary and adrenal diseases)

Growth hormone (GH) – physiology, isoforms, clinical applications and pharmacokinetic/pharmacodynamics monitoring

Endocrine aspects of doping in sports

Animal models to investigate pharmacodynamics aspects in GH related diseases

Nutrient-endocrine interactions

**Work Experience**

since 2003	Head, Endocrine Laboratories and Research Group leader, Neuroendocrine Unit at Medizinische Klinik und Poliklinik IV, Klinikum der LMU, Munich (director: Prof. Dr. M. Reincke)
2001 – 2003	Fellow in laboratory medicine, Central Laboratory (head: Prof. Dr. K. Horn) at Medizinische Klinik, Klinikum der LMU - Innenstadt, Munich
2000 - 2001	Fellow, Department of microbiology and bacteriology, Max von Pettenkofer Institut (head: Prof. Dr. Dr. J. Heesemann)
1997 - 2000	Research fellow, Neuroendocrine Unit Laboratories and clinical fellow, Endocrine Outpatient Clinic, at Medizinische Klinik, Klinikum der LMU - Innenstadt, Munich (director: Prof. Dr. P. C. Scriba, since 2000: Prof. Dr. D. Schlöndorff)
1995 - 1997	Fellow in clinical chemistry and medical immunology, Central Laboratory (head: Prof. Dr. K. Horn) at Medizinische Klinik, Klinikum der LMU - Innenstadt, Munich (director: Prof. Dr. P. C. Scriba)
1993 - 1995	Junior house officer in internal medicine, Red Cross Hospital, Department of Internal Medicine, Munich (director: Prof. Dr. O. A. Müller)
1993	Graduation from medical school (German Medical Board Examination)
1987 - 1993	Medical school, preclinical, clinical, internship in internal medicine, surgery and pediatrics - Ludwig-Maximilians-Universität, Munich

**Academic Society Memberships:**

German Endocrine Society (DGE)

German Society for Clinical Chemistry and Laboratory Medicine (DGKL)

European Society of Endocrinology (ESE)

Endocrine Society (USA)

Growth Hormone Research Society (GRS)

Pituitary Society

European Neuroendocrine Association (ENEA)

European Network on the Study of Adrenal Tumours (ENS@T)

**Relevant Extracurricular Activities:**

1/2017	Editorial Board member “GH&IGF Research”
9/2016	Appointed to the German National Anti Doping Agencies permanent commission “Doping Control System”
1/2016	Editorial Board member “Journal of Clinical Endocrinology and Metabolism”
10/2014	Appointed Secretary of the international Growth Hormone Research Society
10/2012	Elected to the council of the international Growth Hormone Research Society
10/2012	Chair, 6 <sup>th</sup> International Congress of the Growth Hormone Research Society and the IGF Society, Munich, Germany
2012 – 2017	Editorial Board member “Molecular Metabolism” (topic editor clinical chemistry)

## CURRICULUM VITAE

Martin Bidlingmaier, MD

1/2012	Appointed Scientific Advisor Endocrinology of the German Reference Institute for Bioanalytics (RfB) for External Quality Assessment Schemes
1/2011	Appointed to the World Anti Doping Agencies (WADA) Prohibited List Expert Group
10/2009	Appointed Chair, Section for Endocrine Laboratory Diagnostics of the German Society for Clinical Chemistry and Laboratory Medicine
2006 - 2011	Chair, IFCC working group "Growth Hormone" (International Federation of Clinical Chemistry)
2004, 2006	Responsible for training of Anti-Doping laboratories during implementation of the GH doping test in Athens (Olympic summer games 2004) and Turin (Olympic winter games 2006)
1997 - 2000	Scientific secretary of the German Endocrine Society's annual meeting 2000
1996 – 1997	Research visits at Russian Yuri Gagarin Cosmonaut Training Center (Star City near Moscow) and German Space Centre (DLR, Cologne) for experiments in the frame-work of the German-Russian Space Mission "Mir'97"

### **Publications**

253 Thompson Reuters Web of Science-listed articles in peer reviewed journals. 7588 times cited (without self-citations).

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#### 10 recent relevant publications

- Gao Y, Bielohuby M, Fleming T, Grabner GF, Foppen E, Bernhard W, Guzmán-Ruiz M, Layritz C, Legutko B, Zinser E, García-Cáceres C, Buijs RM, Woods SC, Kalsbeek A, Seeley RJ, Nawroth PP, Bidlingmaier M\*, Tschöp MH\*, Yi CX\*. Dietary sugars, not lipids, drive hypothalamic inflammation. *Mol Metab.* 2017 Jun 20;6(8):897-908 (\*co-corresponding authors)
- Yi CX, Walter M, Gao Y, Pitra S, Legutko B, Kälin S, Layritz C, García-Cáceres C, Bielohuby M, Bidlingmaier M, Woods SC, Ghanem A, Conzelmann KK, Stern JE, Jastroch M, Tschöp MH. TNF $\alpha$  drives mitochondrial stress in POMC neurons in obesity. *Nat Commun.* 2017 May 10;8:15143
- Pedersen MH, Svart MV, Lebeck J, Bidlingmaier M, Stødkilde-Jørgensen H, Pedersen SB, Møller N, Jessen N, Jørgensen JOL. Substrate Metabolism and Insulin Sensitivity During Fasting in Obese Human Subjects: Impact of GH Blockade. *J Clin Endocrinol Metab.* 2017 Apr 1;102(4):1340-1349
- Yuen KC, Frystyk J, Rhoads SA, Bidlingmaier M. 2016 Pegvisomant-primed glucagon stimulation test in assessing GH reserve and GH/IGF kinetics in adults suspected of GH deficiency. *Pituitary.* 19(1):65-74.
- Manolopoulou J, Fischer E, Dietz A, Diederich S, Holmes D, Junnila R, Grimminger P, Reincke M, Morganti A, Bidlingmaier M. 2015 Clinical validation for the aldosterone-to-renin ratio and aldosterone suppression testing using simultaneous fully automated chemiluminescence immunoassays. *J Hypertens.* 33(12):2500-11
- Melmed S, Popovic V, Bidlingmaier M, Mercado M, van der Lely AJ, Biermasz N, Bolanowski M, Coculescu M, Schopohl J, Racz K, Glaser B, Goth M, Greenman Y, Trainer P, Mezosi E, Shimon I, Giustina A, Korbonits M, Bronstein MD, Kleinberg D, Teichman S, Gliko-Kabir I, Mamluk R, Haviv A, Strasburger C 2015 Safety and efficacy of oral octreotide in acromegaly: results of a multicenter phase III trial. *J Clin Endocrinol Metab* 100:1699-1708
- Bielohuby M, Zarkesh-Esfahani SH, Manolopoulou J, Wirthgen E, Walpurgis K, Toghiani Khorasgani M, Aghili ZS, Wilkinson IR, Hoeflich A, Thevis M, Ross RJ, Bidlingmaier M 2014 Validation of serum IGF-I as a biomarker to monitor the bioactivity of exogenous growth hormone agonists and antagonists in rabbits. *Dis Model Mech* 7:1263-1273
- Bidlingmaier M, Friedrich N, Emeny RT, Spranger J, Wolthers OD, Roswall J, Korner A, Obermayer-Pietsch B, Hubener C, Dahlgren J, Frystyk J, Pfeiffer AF, Doering A, Bielohuby M, Wallaschofski H, Arafat AM 2014 Reference intervals for insulin-like growth factor-1 (igf-i) from birth to

## CURRICULUM VITAE

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senescence: results from a multicenter study using a new automated chemiluminescence IGF-I immunoassay conforming to recent international recommendations. J Clin Endocrinol Metab 99:1712-1721

- Friedrich N, Wolthers OD, Arafat AM, Emeny RT, Spranger J, Roswall J, Kratzsch J, Grabe HJ, Hübener C, Pfeiffer AF, Döring A, Bielohuby M, Dahlgren J, Frystyk J, Wallaschofski H, Bidlingmaier M. 2014 Age- and sex-specific reference intervals across life span for insulin-like growth factor binding protein 3 (IGFBP-3) and the IGF-I to IGFBP-3 ratio measured by new automated chemiluminescence assays. J Clin Endocrinol Metab. 99(5):1675-86

### **Awards**

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| 11/2011 | Lodwick Award 2011 for excellence in muscular-skeletal research (Massachusetts General Hospital / Harvard Medical School, Boston, MA) |
| 02/2007 | Hugo Wilhelm von Ziemssen Award (Medizinische Klinik - Innenstadt, Munich, Germany)   |

### **Scientific reviewer for periodicals (selection):**

American Journal of Physiology, Clinical Chemistry, Clinical Endocrinology, Endocrine, Endocrine Connections, Endocrine Related Cancer, Endocrinology, European Journal of Endocrinology, Growth Hormone & IGF Research, Hypertension, Journal of Clinical Endocrinology and Metabolism, Journal of Molecular Endocrinology, Molecular Metabolism



Munich, 24 January 2018