

BIOGRAPHICAL SKETCH

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NAME: Meyer-Bahlburg, Heino F. L.

eRA COMMONS USER NAME (credential, e.g., agency login): MEYERBAHL

POSITION TITLE: Research Scientist; Professor of Clinical Psychology (in Psychiatry)

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
University of Hamburg, Germany	Vordiplom (B.S.)	1963	Psychology
University of Hamburg, Germany	Diplom	1966	Psychology
University of Düsseldorf, Germany	Dr. rer. nat.	1970	Psychology

A. Personal Statement**B. Positions and Honors****Positions**

1970-1975 Research Assistant Professor in Pediatrics, State University of New York, Buffalo, NY
 1970-1977 Clinical Associate, Department of Psychology, State University of New York, Buffalo, NY
 1970-1977 Co-Director, Program of Psychoendocrinology, Children's Hospital, Buffalo, NY
 1971-1974 Senior Staff Counselor-Psychologist, Department of Child Psychiatry and Behavioral Sciences, Children's Hospital, Buffalo, NY
 1972-1975 Research Assistant Professor of Psychology, Department of Psychiatry, State University of New York, Buffalo, NY
 1974-1977 Program Head, Psychoendocrinology Clinic, Children's Hospital, Buffalo, NY
 1975-1977 Research Associate Professor, Department of Psychology, Psychiatry and Pediatrics, State University of New York, Buffalo, NY
 1977-present Research Scientist, Child Psychiatry, New York State Psychiatric Institute, New York, NY
 1977-1978 Lecturer, Department of Psychiatry, Columbia University, New York, NY
 1978-1981 Associate Clinical Professor of Medical Psychology, Dept. Psychiatry, Columbia University, New York, NY
 1978-1990 Pediatric Behavioral Endocrinologist, Psychiatry Service, NY Presbyterian Hosp., New York, NY
 1981-1990 Associate Professor of Clinical Psychology, Dept. Psychiatry, Columbia University, New York, NY
 1990-present Full Professional Psychologist, Psychiatry Service, NY Presbyterian Hosp., New York, NY
 1990-present Professor of Clinical Psychology, Dept. Psychiatry, Columbia University, New York, NY

Honors: (selected)

1970 Dr. rer. nat. magna cum laude, University of Düsseldorf, Germany
 1980-1989 Secretary-Treasurer, International Academy of Sex Research
 1985-1987 Member, Gender Identity Disorder Committee for DSM-III-R, Amer. Psychiatric Association
 1988-1989 Coordinator, NIMH Work Group on Psychosexual Assessment in AIDS Research
 1989-1994 Member, Gender Identity Disorder Subcommittee for DSM-IV, Amer. Psychiatric Association
 1990-1991 President, International Academy of Sex Research
 1993 Distinguished Scientific Achievement Award of the Society for the Scientific Study of Sex

- 1999-2005 Member, Sexuality Research Fellowship Program Selection Committee, Social Science Research Council; Co-Chair 2005
- 2001-2002 Member, Joint LWPEs / ESPE Consensus Workshop on Congenital Adrenal Hyperplasia (Gloucester, MA, March 14-17, 2002)
- 2001-2002 Member, Planning Panel for NICHD Research Planning Workshop on Research on Intersexuality
- 2004-2005 Chair, Subgroup 5, Psychosocial Management of Patients with Intersexuality and Related Conditions, International Consensus Conference on Intersex (Chicago, IL, October 27-30, 2005)
- 2007-2008 Member, Standards of Care Workgroup, World Professional Association for Transgender Health
- 2008-2012 Member, Sexual and Gender Identity Disorders Work Group for DSM-5 of the American Psychiatric Association
- 2008-2012 Consultant, American Psychiatric Association Task Force on Gender Identity Disorders
- 2009-2010 Member, Endocrine Society Task Force for the Development of Clinical Practice Guidelines on Congenital Adrenal Hyperplasia
- 2010 Invited Participant, IOC/IAF Experts Meeting on Disorders of Sex Development in Athletes, Miami, FL, January 17-18, 2010 [International Olympics Committee; International Athletics Foundation]
- 2010 Wilhelm-von-Humboldt Foundation Lifetime Achievement Award [related to gender/sexuality research], Berlin, Germany
- 2010-2011 Member, Standard-of-Care Revision Committee of the World Professional Association for Transgender Health
- 2011-2012 Member, Working Party on DSD Evaluation [sponsored by several pediatric societies in the U.S. and Europe]
- 2012-present Member, Scientific Advisory Board of DSD-Life [project in six European countries on somatic disorders of sex development funded by the EU]
- 2013 Recipient, Faculty Teaching Award, New York-Presbyterian Hospital Child and Adolescent Psychiatry Residency Training Program of Columbia and Cornell Universities
- 2013-present Consultant to the Workgroup on Gender Dysphoria of the American Psychiatric Association Council on Research and Quality of Care
- 2014 Recipient, Harry Benjamin Lifetime Distinguished Scientific Achievement Award, World Professional Association for Transgender Health
- 2014 Invited participant and speaker, NICHD Scientific Research Workshop "Growing up with DSD: Critical Developmental Issues for Children and Families Affected by Disorders of Sex Development". Bethesda, MD, March 26-27, 2014.
- 2015 Invited participant, NICHD Transgender Health and Medicine Research Conference. Bethesda, MD, May 7-8, 2015.
- 2015-present Member, Endocrine Society Task Force to update the Clinical Practice Guidelines on Congenital Adrenal Hyperplasia.
- 2015-present Member, Standards of Care Revision (SOC-8) Committee of the World Professional Association for Transgender Health

C. Contribution to Science

1. Prenatal sex hormone treatment: Early psychoendocrine studies of mine focused on the effects of hormones administered to pregnant mothers for indications of various pregnancy problems on the gender behavior (and other psychological outcomes) in the offspring. C-21 progestogens and the non-steroidal estrogen, diethylstilbestrol (DES), were the primary focus in several studies (funded by several private-foundation and federal grants, with my psychologist colleague, Dr. Anke A. Ehrhardt, and myself variably functioning as PIs or Co-PIs). Primary findings were that C-21 progestogens slightly, but significantly, diminished behavioral masculinity (which was not accounted for by pregnancy problems), while DES had no effect on gender behavior, but was associated with modest increases of homosexual orientation in adult women. The lack of estrogen effects on human gender behavior contrasts with findings in rodents, but is in line with the results of subsequent studies on several syndromes of somatic intersexuality.
 - a. Meyer-Bahlburg HFL, Grisanti GC, Ehrhardt AA. Prenatal effects of sex hormones on human male behavior: Medroxyprogesterone acetate (MPA). *Psychoneuroendocrinology*. 1977;2:383-390.

- b. Meyer-Bahlburg HFL, Feldman JF, Cohen P, Ehrhardt AA. Perinatal factors in the development of gender-related play behavior: Sex hormones versus pregnancy complications. *Psychiatry*. 1988;51: 260-271.
 - c. Ehrhardt AA, Meyer-Bahlburg HFL, Rosen LR, et al. The development of gender-related behavior in females following prenatal exposure to diethylstilbestrol (DES). *Horm Behav*. 1989;23:526-541.
 - d. Meyer-Bahlburg HFL, Ehrhardt AA, Rosen LR, et al. Prenatal estrogens and the development of homosexual orientation. *Dev Psychol*. 1995;31:12-21.

2. Sexual risk behavior and HIV/AIDS: As PI of the Psychosexual Core during the initial 15 years of our federally funded HIV Center (PI of P-50: Dr. Anke A. Ehrhardt), I developed numerous systematic, comprehensive interview schedules, called Sexual Risk Behavior Assessment Schedules (SERBAS), tailored to the needs of HIV/AIDS-related individual projects, with an elaborate manualized training and monitoring program for interviewers. We demonstrated the feasibility (and replicability) of such interviews even in marginalized populations such as runaway adolescents, severely mentally ill persons in psychiatric institutions as well as among the homeless, and prepubertal children. These interview schedules were employed throughout the determinant and intervention projects of our HIV-Center and by many investigators elsewhere and became the basis of our now ACASI-based sexual-behavior assessments. Variables derived from these interviews were shown to be associated with HIV status, HIV-seroconversion, and T helper cell response to HIV-1 peptides.
 - a. Rotheram-Borus MJ, Meyer-Bahlburg HFL, Rosario M, et al. Lifetime sexual behaviors among predominantly minority male runaways and gay/bisexual adolescents in New York City. *AIDS Educ Prev*. Fall 1992;Suppl: 34-42.
 - b. McKinnon K, Cournos F, Meyer-Bahlburg HFL, et al. Reliability of sexual risk behavior interviews with psychiatric patients. *Am J Psychiatry*. 1993;150:972-974.
 - c. Meyer-Bahlburg HFL, Dolezal C, Clerici M, Lederman S. Sexual risk behavior is associated with T helper cell response to HIV-1 peptides in HIV- and HIV+ men. *AIDS Behav*. 1997;1:181-190.
 - d. Meyer-Bahlburg HFL, Dolezal CL, Wasserman GA, Jaramillo, B.M. Prepubertal boys' sexual behavior and behavior problems. *AIDS Educ Prev*. 1999;11:174-186.

3. Psychobiology of gender and sexual orientation: In a variety of collaborative studies with endocrinologists, funded by private foundations as well as NIMH and NICHD (again often jointly with Dr. Anke A. Ehrhardt), I have studied the psychological outcomes of persons with somatic intersexuality/disorders of sex development in terms of gender behavior, gender identity, sexuality, body image, psychiatric problems, and quality of life, from childhood through adulthood. Among many findings, our studies demonstrated the predicted correlation of prenatal androgens with gender behavior and with sexual orientation, described in detail gender dysphoria and patient-initiated gender change in older adolescent and adult women with CAH, and documented impaired body image, delayed sexual initiation (if any), and impaired sexual functioning of XY and XX patients with a history of genital surgery.
 - a. Meyer-Bahlburg HFL, Gruen RS, New MI, et al. Gender change from female to male in classical CAH. *Horm Behav*. 1996;30:319-332.
 - b. Migeon CJ, Wisniewski AB, Gearhart JP, et al. Ambiguous genitalia with perineoscrotal hypospadias in 46,XY individuals: Long-term medical, surgical, and psychosexual outcome. *Pediatrics*. 2002;110(3). Available at: <http://www.pediatrics.org/cgi/content/full/110/3/e31>
 - c. Meyer-Bahlburg HFL, Dolezal C, Baker SW, Ehrhardt AA, New MI. Gender development in women with congenital adrenal hyperplasia as a function of disorder severity. *Arch Sex Behav*. 2006;35(6): 667-684.
 - d. Meyer-Bahlburg HFL, Dolezal C, Baker SW, New MI. Sexual orientation in women with classical or non-classical congenital adrenal hyperplasia as a function of degree of prenatal androgen excess. *Arch Sex Behav*. 2008;37:85-99.

4. Gender assessment: Development of tools with appropriate psychometric qualities for the systematic assessment of gender behavior, gender identity, sexuality, etc. is an important part of research in this area. Thus, my team has published a variety of methods for children, adolescents and adults in this area (both tools based on self-report and on parent report), some in collaboration with endocrinologists and urologists, others in joint efforts with psychological gender specialists.

- a. Meyer-Bahlburg HFL, Sandberg DE, Dolezal CL, Yager TJ. Gender-related assessment of childhood play. *J Abnorm Child Psychol* 1994;22:643-660.
 - b. Meyer-Bahlburg HFL, Sandberg DE, Yager TJ, Dolezal CL, Ehrhardt AA. Questionnaire scales for the assessment of atypical gender development in girls and boys. *J Psychol Human Sex.* 1994;6:19-39.
 - c. O=Sullivan LF, Meyer-Bahlburg HFL, McKeague IW. The development of the Sexual Self- Concept Inventory for early adolescent girls. *Psychol Women Q.* 2006;30:139-149.
 - d. Deogracias JJ, Johnson LL, Meyer-Bahlburg HFL, Kessler SJ, Schober JM, Zucker KJ. The Gender Identity/Gender Dysphoria Questionnaire for Adolescents and Adults. *J Sex Res.* 2007;44:370-379.
 - e. Meyer-Bahlburg HFL, Dolezal C, Johnson LL, Kessler SJ, Schober JM, Zucker KJ. Development and validation of the Pregnancy and Infant Orientation Questionnaire. *J Sex Res* 2010;47:598-610.
5. Gender-confirming genital surgery in intersexuality: In a number of federally funded studies I have investigated (along with developing respective assessment methods) the cosmetic and functional outcomes of gender-confirming genital surgery in patients with intersexuality.
- a. Meyer-Bahlburg, HFL. Gender assignment and reassignment in intersexuality: Controversies, data, and guidelines for research. *Adv Experim Med Biol* 2002;511:199-223.
 - b. Migeon CJ, Wisniewski AB, Gearhart JP, Meyer-Bahlburg HFL et al. Ambiguous genitalia with perineoscrotal hypospadias in 46,XY individuals: Long-term medical, surgical, and psychosexual outcome. *Pediatrics* 2002;110(3) <http://www.pediatrics.org/cgi/content/full/110/e31>
 - c. Schober JM, Meyer-Bahlburg HFL, Ransley PG. Self-assessment of genital anatomy, sexual sensitivity and function in women: Implications for genitoplasty. *Br J Urol Int* 2004;94:589-594.
 - d. Schober JM, Meyer-Bahlburg HFL, Dolezal C. Self-ratings of genital anatomy, sexual sensitivity and function in men using the 'Self-Assessment of Genital Anatomy and Sexual Function, Male' questionnaire. *Br J Urol Int* 2009;103:1096-1103.
 - e. Schober JM, Alguacil NM, Cooper RS, Pfaff DW, Meyer-Bahlburg HFL. Self-assessment of anatomy, sexual sensitivity, and function of the labia and vagina. *Clinical Anatomy* 105;28(3):355-362.
6. Effects of prenatal dexamethasone exposure: To suppress genital masculinization of 46,XX fetuses with CAH, pregnancies at risk for yielding such fetuses have been and are being treated in many countries with administration of dexamethasone to the pregnant mother. This treatment is controversial because of the risk of side effects on physiology and brain, which has been shown mostly in high-dose animal studies and suggested by some small-sample studies in humans. With the help of several federal grants, I have conducted – jointly with Dr. Maria I. New at Mt. Sinai Medical Center – follow-up studies of the long-term cognitive and psychiatric outcomes that show no long-term adverse effects in short-term exposed (until prenatal diagnosis) children without CAH and in short-term-exposed boys with CAH, but potentially adverse modest-size effects in 46,XX CAH treated throughout pregnancy.
- a. Trautman PD, Meyer-Bahlburg HFL, Postelnek J, New MI. Effects of early prenatal dexamethasone on the cognitive and behavioral development of young children: Results of a pilot study. *Psychoneuroendocrinology.* 1995;20:439-449.
 - b. Trautman PD, Meyer-Bahlburg HFL, Postelnek J, New MI. Mothers' reactions to prenatal diagnostic procedures and dexamethasone treatment of congenital adrenal hyperplasia. *J Psychosom Obstet Gynecol.* 1996;17:175-181.
 - c. Meyer-Bahlburg HFL, Dolezal C, Baker SW, Carlson AD, Obeid JS, New MI. Cognitive and motor development of children with and without congenital adrenal hyperplasia after early-prenatal dexamethasone. *J Clin Endocrinol Metab.* 2004;89:610-614.
 - d. Meyer-Bahlburg H FL, Dolezal C, Haggerty R, Silverman M, New M I. Cognitive outcome of offspring from dexamethasone-treated pregnancies at risk for congenital adrenal hyperplasia due to 21-hydroxylase deficiency. *Eur J Endocrinol.* 2012;167(1):103-110. doi: 10.1530/EJE-11-0789.
7. Intersex stigma: More recently, I have embarked on the documentation of the various aspects of stigmatization experienced by girls and women with CAH.

- a. Meyer-Bahlburg HFL. Introduction to the Special Section on Culture and Variants of Sex/Gender: Bias and Stigma. *Arch Sex Behav.* 2017;46:337-339. doi: 10.1007/s10508-016-0871-7
 - b. Meyer-Bahlburg HFL, Reyes-Portillo J, Khuri J, Ehrhardt AA, New MI. Syndrome-related stigmatization in the general social environment as reported by women with classical congenital adrenal hyperplasia. *Arch Sex Behav* 2017;46:341-351. doi: 10.1007/s10508-016-0862-8
 - c. Meyer-Bahlburg HFL, Khuri J, Reyes-Portillo J, New MI. Stigma in medical settings as reported retrospectively by women with congenital adrenal hyperplasia (CAH) for their childhood and adolescence. *J Pediatr Psychol* 2016; doi: 10.1093/jpepsy/jsw034.
8. Intersex-and transgender-related policy/guideline work: As both clinician and researcher engaged in much interdisciplinary work, I have been frequently called upon to participate as consultant, member, or leader in various Task Forces and Work Groups of professional societies that were established to formulate (preferably evidence-based) psychiatric-diagnostic categories, treatment guidelines, and policy statements (see section Honors above). These efforts were organized by organizations such as NICHD, American Psychiatric Association, Endocrine Society, international consortia of Pediatric Endocrine and Pediatric Urology Societies, World Professional Association for Transgender Health, etc.
- a. Hughes IA, Houk C, Ahmed SF, Lee PA, LWPEES Consensus Group, ESPE Consensus Group. Consensus statement on management of intersex disorders. *Arch Dis Child.* 2006;91:554-563.
 - b. Speiser PW, Azziz R, Baskin LS, et al. Congenital adrenal hyperplasia due to steroid 21-hydroxylase deficiency: An Endocrine Society Clinical Practice Guideline. *J Clin Endocrinol Metab.* 2010;95(9):4133-4160.
 - c. Byne W, Bradley SJ, Coleman E, et al. Report of the American Psychiatric Association Task Force on Treatment of Gender Identity Disorder. *Arch Sex Behav.* 2012;41:759-796. doi: 10.1007/s10508-012-9975-x.
 - d. American Psychiatric Association. Diagnostic and statistical manual of mental disorders, 5th ed. (DSM-5). Washington, DC: APA, 2013.
 - e. Meyer-Bahlburg HFL, Baratz Dalke K, Berenbaum SA, et al. Gender assignment, reassignment, and outcome in disorders of sex development: Update of the 2005 Consensus Conference. *Horm Res Paediatr* 2016;85(2):112-118.
 - f. Mouriquand PDE, Gorduza DB, Gay C-L, Meyer-Bahlburg HFL, et al. Surgery in disorders of sex development (DSD) with a gender issue: If (why), when, and how? *J Pediatr Urol* 2016;12(3):139-149.
 - g. Olson-Kennedy J, Cohen-Kettenis PT, Kreukels BP, Meyer-Bahlburg HFL. Research priorities for gender nonconforming/transgender youth: Gender Identity development and psychosocial outcomes. *Current Opinion in Endocrinology, Diabetes and Obesity* 2016;23(2):172-179.
 - h. Lee PA, Nordenstrom A, Houk CP, Ahmed SF, Auchus R, Baratz A, Baratz Dalke K, Liao L-M, Lin-Su K, Looijenga 3rd LHJ, Mazur T., Meyer-Bahlburg HFL, Mouriquand P, Quigley CA, Sandberg DE, Vilain E, Witchel S, The Global DSD Update Consortium. Global disorders of sex development update since 2006: Perceptions, approach and care. *Horm Res Paediatr* 2016;85(3):158-180.

Complete List of Published Work in My Bibliography:

<http://www.ncbi.nlm.nih.gov/sites/myncbi/heino.fl.meyer-bahlburg.1/bibliography/40608041/public/?sort=date&direction=ascending>

D. Research Support

Ongoing Research Support

P30 MH43520 Remien (PI)

09/30/87 - 01/31/18

NIMH

HIV Center for Clinical and Behavioral Studies

This large multidisciplinary AIDS research center aims to advance the science of HIV prevention, treatment, and care by providing the building blocks of new combination prevention strategies with concentration on the roles of mental health, sexual behavior, gender, and health disparities; to realize the full potential of biomedical HIV prevention and treatment strategies through application of behavioral and social science theory and

research; and to use principles of implementation science to maximize the public health impact of new HIV prevention and care strategies and close the gaps among research, practice, and policy

Role on project: During the current 5-yr period, Dr. Meyer-Bahlburg is Director of the Development Core; during the preceding 10 years, Director of the Interdisciplinary Research Methods Core, and before that Principal Investigator of the Psychosexual Assessment Core.

R01 HD79603 Bockting (PI)

09/25/14 - 06/30/19

NICHD

Identity Development, Risk, and Resilience among Gender Diverse Populations

This study takes a longitudinal, mixed-method approach to uncover the mechanism of how stigma and minority stress affect health and psychosocial development among this population, identifying periods of acute vulnerability and corresponding resilience. Findings will inform the development of intervention strategies aimed at reducing stigma and promoting the health and well-being of this and other stigmatized populations.

Role on project: Dr. Meyer-Bahlburg is Co-Investigator on this grant.

Completed Research Support

None