Curriculum Vitae

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Education

- July 1999 to March 2004: PhD thesis at the Humboldt-University (Berlin, Germany): „Die Entwicklung des Pfeilschwanzkrebses *Limulus polyphemus* und anderer Arthropoden unter besonderer Berücksichtigung der Neurogenese“ (magna cum laude; The embryology of the horseshoe crab *Limulus polyphemus* and other arthropods with main focus on neurogenesis)
- October 1997 to October 1998: Diploma thesis with Prof. Dr. Gerhard Scholtz at the Humboldt-University (Berlin, Germany): „Die Keimstreifbildung und das Expressionsmuster des Homoeobox-Gens *Distal-less* bei primär flügellosen Insekten (Collembola, Zygentoma) (The embryology and the expression pattern of the Homeobox gene *Distal-less* in apterygote insects (Collembola, Zygentoma)). Awarded with the Katharina-Heinroth-Award 1999 of the Gesellschaft der Naturforschenden Freunde zu Berlin
- June 1997: Diploma in Biology (major subjects: Zoology, Morphology, Evolutionary Biology, Molecular Biology & Genetics, Ecology, Soil Science)
- November 1991 to June 1997: Course of studies in Biology at the Julius-Maximilians-Universität (Würzburg) and the Albert-Ludwigs-Universität (Freiburg)
- October 1987 to October 1990: Course of studies in Informatics (Computer Science) at the University of Karlsruhe

Professional activity

- WS 2013/2014 Lectureship and practical of the modul “Domestic fauna”, Chair Evolutionary Biology & Ecology, Albert-Ludwigs-Universität Freiburg
- WS 2012/2013 Temporary professorship (Chair Evolutionary Biology & Ecology, Albert-Ludwigs-Universität Freiburg)
- As of December 2009: guest scientist at Albert-Ludwigs-Universität Freiburg, Lab Prof. Dr. Karl-Friedrich Fischbach. (Project: “Morphological and molecular-genetic analysis of the development of sensory organs in arthropods (Chelicerata, Myriapoda, Crustacea, Hexapoda) - a first step in understanding the generation of the diversity in the peripheral nervous system during arthropod evolution.” DFG MI 1389/1-1).

- As of July 2008-September 2013: Postdoc at Queen Mary College, University of London, School of Biological and Chemical Sciences, Lab PD Dr. Angelika Stollewerk.
- September 2007 to June 2008: Scientist (Senior Researcher III) at the Danube Delta National Institute for Research & Development (Tulcea, Romania) for biodiversity assessment (arthropods) in the Danube Delta
- January 2003 to May 2007: Working as Study Data Manager and Project Data Manager being responsible for global clinical trials and global clinical projects in oncology and renal anemia for F. Hoffmann-La Roche, Basel, Switzerland
- 1998/1999: Translation from English to German and editorial supervision of the book „Humans before Humanity – Menschen vor *Homo sapiens*“, written by the paleoanthropologist Prof. Dr. Robert A. Foley (Cambridge, UK) for the Jan Thorbecke Publishing House (2000)
- October 1990 to October 1991: Working as Sales-Manager for Luxemburger Computers (Freiburg)

Further scientific activities

- May/June 2000: Visiting scientist at the Marine Biological Laboratory (MBL) in Woods Hole (Massachusetts, USA; invited by Prof. Dr. Robert B. Barlow) and at the institute for Neuroscience at the Wellesley-College (Boston, USA; invited by Prof. Dr. Barbara Beltz)
- May/June 2001: Visiting scientist at the Marine Biological Laboratory (MBL) in Woods Hole (Massachusetts, USA; invited by Prof. Dr. Robert B. Barlow)
- 1999-2009: Cooperation with Prof. Dr. Robert B. Barlow (Medical School, Syracuse, New York, USA, † 24.12.2009)
- Participation in a television report (broadcaster arte) about horseshoe crabs: “Fossil mit blauem Blut” (“Blue-blooded fossil” broadcasted in June 2001 and December 2001)
- May to September 2002: Visiting scientist at the Marine Biological Laboratory (MBL) in Woods Hole (Massachusetts, USA) as scholarship holder of the „Grass Foundation for Neuroscience“; during this research period:
  - First award winner of the MBL/Zeiss Photo contest 2002 „Scientific Imaging“
  - First award winner at the MBL „General Scientific Meeting 2002“ for graduate students talks
- Numerous scientific lectures on behalf of different scientific organizations. For example
  - Lecture „Der Pfeilschwanzkrebs *Limulus polyphemus* - ein lebendes Fossil in der modernen Forschung” (September 2001, Zoo Leipzig; The horseshoe crab *Limulus polyphemus* – a living fossil in today’s science)
  - Lecture about „Der Pfeilschwanzkrebs *Limulus polyphemus* - ein lebendes Fossil in der modernen Forschung” (April 2002, Jura-Museum, Eichstätt; The horseshoe crab *Limulus polyphemus* – a living fossil in today’s science)
  - Lecture „Whip spiders and scorpions – Exciting mating behaviors in Arachnids” (October 2002, Zoo Leipzig)
  - Lecture „The fascinating world of insects“ (October 2003, Zoo Leipzig)
  - Lecture „The colorful world of butterflies“ (October 2004, Zoo Leipzig)
  - Lecture „Methods of Evolutionary Biology” (May 2005, University of Oradea, Romania)
  - Lecture „Octopus and squid – intelligent denizens of the Ocean” (June 2005, Zoo Leipzig)
  - Lecture „The horseshoe crab *Limulus polyphemus* – a living fossil in today’s science” (March 2006, Danube Delta National Institute for Research & Development, Tulcea, Romania)
  - Lecture „The fascinating life of Crustaceans” (October 2006, Zoo Leipzig)

  - Lecture „The horseshoe crab *Limulus polyphemus* – a living fossil in today's science" (November 2006, Museum of Natural History, Karlsruhe)
  - Lecture „The horseshoe crab *Limulus polyphemus* – a living fossil in today's science" (March 2011, Gondwna-Prähistorium, Schiffweiler)
- June 2005 to June 2006: Teaching Natural Sciences for children between 6 and 9 years, organized by the Primary Schools Council in Heilbronn (Germany)

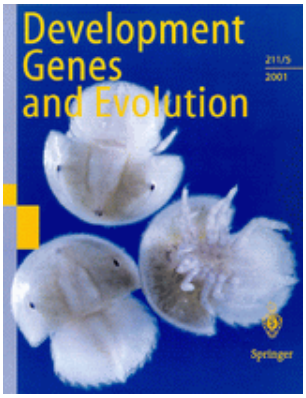
Teaching and research at the Universities Freiburg (1994-1999, 2009-2014) and Berlin (1999-2002)

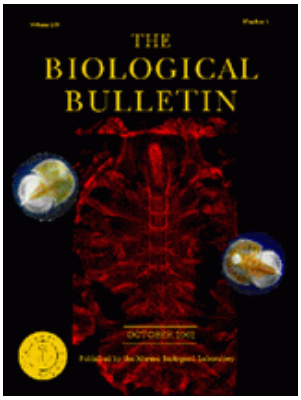
- Assistant teacher in many practical courses for the institutes of Zoology and Developmental Biology at the University Freiburg (Anatomy of vertebrates; Embryology; Morphology and Systematics of animals; Evolutionary Zoology; several practical courses (outdoor) for the determination of animals and plants etc.)
- Research with Scanning Electron (SEM) and Chaetotaxonomics with larvae of beetles for the institute of Evolutionary Zoology
- Preparation, determination and statistical analysis of the beetles (Coleoptera) of the „Kaiserstuhl-Collection", which is working on fauna-changes of the Kaiserstuhl area for more than 20 years (institute of Evolutionary Zoology)
- Behaviour research with parasitic beetles (Staphylinidae); (Institute of Evolutionary Zoology)
- Ecological examinations and statistical analysis of the beetles population in the area Freiburger Mooswald; shared project with Prof. Dr. Josef K. Müller, (Institute of Evolutionary Zoology, department of ecology)
- Guided tours through the Museum of Anatomy (Basel, Switzerland) and the Museum of Natural History (Basel, Switzerland) for upper grade students of Zoology, Botany, Medicine and Geology
- May 1999 to July 1999: Development of new immunocytochemical methods for the department of Prof. Dr. Gerhard Scholtz (Comparative Zoology) at the Humboldt- University Berlin; continued during PhD
- WS 2009/2010 Lectureship and practical of the modul "Arthropoda" (parts Myriapoda and Insecta), Chair Evolutionary Biology & Ecology, Albert-Ludwigs-Universität Freiburg
- SS 2010 & SS 2011 Lectureship module "Ecology" (partly), (Chair Evolutionary Biology & Ecology, Albert-Ludwigs-Universität Freiburg)
- SS 2011 & SS 2012 & 2013 Seminar on "Evolution of the brain" together with Prof. K.-F. Fischbach, Albert-Ludwigs-Universität Freiburg
- WS 2012/2013 Temporary professorship (Chair Evolutionary Biology & Ecology, Albert-Ludwigs-Universität Freiburg)
- WS 2013/2014 Lectureship and practical of the modul "Domestic fauna", Chair Evolutionary Biology & Ecology, Albert-Ludwigs-Universität Freiburg

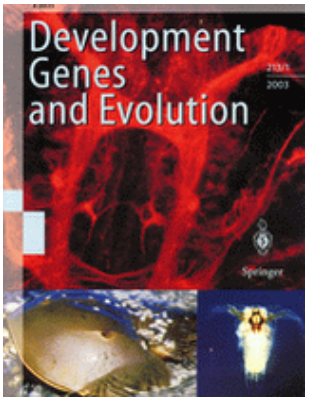
Professional membership

- Deutsche Zoologische Gesellschaft (DZG, German Zoological Society)
- Deutsche Gesellschaft für Mykologie (DGFM, German Society for Mycology)
- European Society for Evolutionary Developental Biology (EED)

Publications







- Peschke, K., Fuldner, D., **Mittmann, B.** (1996): *A. clavicornis*, a stepping stone in the evolution of parasitoid behaviour in the rove beetles genus *Aleochara* (Coleoptera: Staphylinidae). Abstr. XX. Intern. Congr. Entomol., Firenze.
- **Mittmann, B.** (1997): Rezension über: Bense, U. (1995): Longhorn Beetles, Illustrated Key to the Cerambycidae and Vesperidae of Europe (Markgraf Verlag). Mitteilungen des badischen Landesverbandes für Naturkunde und Naturschutz, 3/4, 653f.
- **Mittmann, B.**, Scholtz, G. (1998): The expression pattern of the homeobox gene *Distal-less* in apterygote insects. Zoology, 101 (Suppl.I), 22.
- Scholtz, G., **Mittmann, B.**, Gerberding, M. (1998): The pattern of *Distal-less* expression in the mouthparts of crustaceans, myriapods and insects: new evidence for a gnathobasic mandible and the common origin of Mandibulata. International Journal of Developmental Biology 42: 801-810.
- Maus, C., **Mittmann, B.**, Peschke, K. (1998): Host record of parasitoid *Aleochara* Gravenhorst species (Coleoptera: Staphylinidae) attacking puparia of cyclorrhapheous Diptera. Deutsche Entomologische Zeitschrift 45 (2): 231 – 254.
- Robert Foley (2000): Menschen vor *Homo sapiens*. Wie und warum unsere Art sich durchsetzte. Translated by **Beate Mittmann**. Editor Wighart v. Koenigswald. Thorbecke SPECIES Band 5.
- **Mittmann, B.** (2000): Die Keimstreifbildung und das Expressionsmuster des Homoeobox Gens *Distal-less* bei primär flügellosen Insekten (Collembola, Zygentoma). Sitzungsberichte der Naturforschenden Freunde Berlin (N.F.) 38: 93-103.
- **Mittmann, B.**, Scholtz, G. (2000): The expression pattern of the homeobox gene *Distal-less* in the horseshoe crab *Limulus polyphemus* (Chelicerate, Xiphosura) and the silverfish *Lepisma saccharina* (Insecta, Zygentoma): Is *Distal-less* directly correlated with the differentiation of sensory bristles? Zoology 193 (Suppl. III): 11.
- **Mittmann, B.**, Scholtz, G. (2001): *Distal-less* expression in embryos of *Limulus polyphemus* (Chelicerata, Xiphosura) and *Lepisma saccharina* (Insecta, Zygentoma) suggests a role in the development of mechanoreceptors, chemoreceptors, and the CNS. Development Genes and Evolution 211(5): 232-243.
- Errigo, M., Mc Guinnes, C., Meadors, S., **Mittmann, B.**, Dodge, F., Barlow, R. (2001): Visually guided behaviour of juvenile horseshoe crabs. Biol. Bull. 201: 271- 71.
- **Mittmann, B.** (2002): Early Neurogenesis in the Horseshoe Crab *Limulus polyphemus* (Chelicerata, Xiphosura) and its Implication for Arthropod Relationships. Biol. Bull. **203**: 221-222.
- **Mittmann, B.**, Scholtz, G. (2003): Development of the nervous system in the „head“ of *Limulus polyphemus* (Chelicerata: Xiphosura): morphological evidence for a correspondence between the segments of the chelicerae and of the (first) antennae of Mandibulata. Dev. Genes Evol. **213**: 9-17.
- Scholtz, G., Braband, A., Tolley, L., Reimann, A., **Mittmann, B.**, Lukhaup, C., Steuerwald, F., Vogt, G. (2003): Parthenogenesis in an outsider crayfish. Nature: 421: 806.

- **Mittmann, B.** (2010): Bleiben wir auf dem Boden der Wissenschaft. Kritik am Artikel „Evolutionäre Ethik (Hans Mohr). Erwägen, Wissen, Ethik (Hsg. Benseler, F., Blanck, R., Loh, W.), Jg. 21/2010, Lucius et Lucius Verlagsgesellschaft Stuttgart.
- Kauz, R., **Mittmann, B.** (2010): Der Pfeilschwanzkrebs (*Tachypleus tridentatus*) in der chinesischen Literatur, Medizin und Küche. In Ptak, R. (Ed. with technical support of Nürnberger, M.), *Marine Animals in Traditional China: Studies in Cultural History/Meerestiere im alten China: Studien zur Kulturgeschichte*, ser. Maritime Asia 21 (Wiesbaden: Harrassowitz), p. 3-20.
- **Mittmann, B.**, Wolff, C. (2012): Embryonic development and staging of the cobweb spider *Parasteatoda tepidariorum* C. L. KOCH, 1841 (syn.: *Achaearanea tepidariorum;* Araneomorphae; Theridiidae). Dev Genes Evol: 222: 189-216. DOI 10.1007/s00427-012-0401-0
- **Mittmann, B.** (in preparation): Make more of your spider: Number of cocoons and eggs during the laboratory life span of the cobweb spider *Parasteatoda tepidariorum* C. L. KOCH, 1841 (syn.: *Achaearanea tepidariorum;* Araneomorphae; Theridiidae).
- **Mittmann, B.**, Ungerer, P., Klann, M., Stollewerk, A., Wolff, C. (submitted): Development and staging of the water flea *Daphnia magna* (Straus, 1820; Cladocera, Daphniidae) based on morphological landmarks.