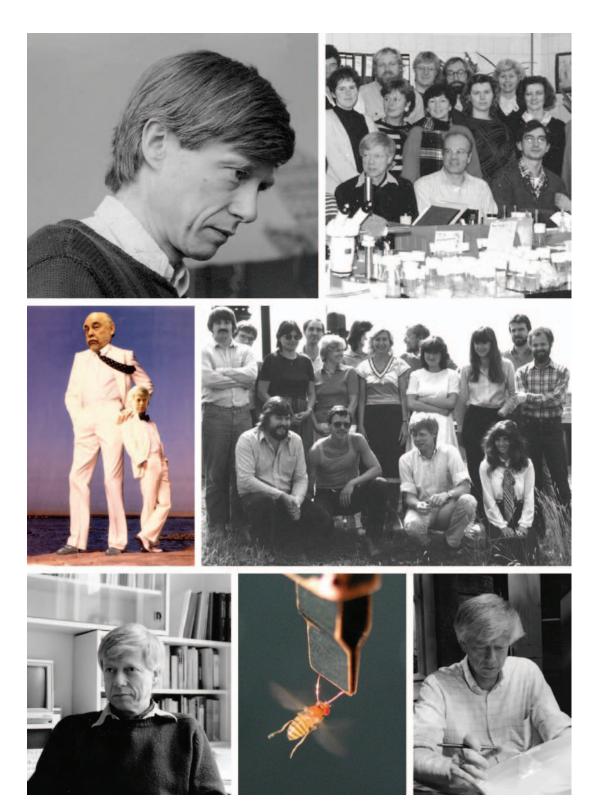
J. Neurogenetics, 23: 127–135 Copyright © 2009 Informa UK Ltd. ISSN: 0167-7063 print/1563-5260 online DOI: 10.1080/01677060902796386





 $panel_01.$

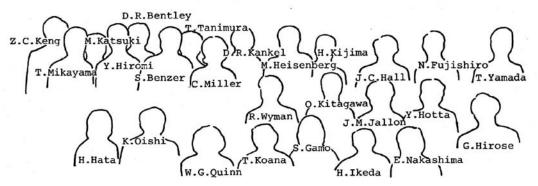


 $panel_02.$

$panel_01$

- 1. Martin Heisenberg (1977)
- 2. Some members of the Heisenberg lab (ca. 1987). Left to right upper row: H Roth, K Störtkuhl, G Pflugfelder, G Neckermann middle row: D Kretzschmar, J Roth, D Richter, (unidentified), S Hemm bottom row: MH, E Buchner, K Zinsmaier
- 3. Heisenberg's tribute to Melvin M Green who inducted the Heisenberg lab into the deeper mysteries of *Drosophila* genetics.
- 4. Early members of the Department for Genetics (ca. 1983) Left to right upper two rows: KF Fischbach, K Störtkuhl, (*unidentified*), J Blondeau, K Schulze, C Götz, G Neckermann, K Vogtmann, C Götz, S Hein, G Technau, P Coombe bottom row: R Wolf, A Borst, MH, H Mariath.
- 5. MH in his old office at the department's former downtown location (ca 1987).
- 6. Female Drosophila in tethered flight at the torquemeter.
- 7. MH during summer break in Urfeld, Southern Bavaria. (ca. 1995)

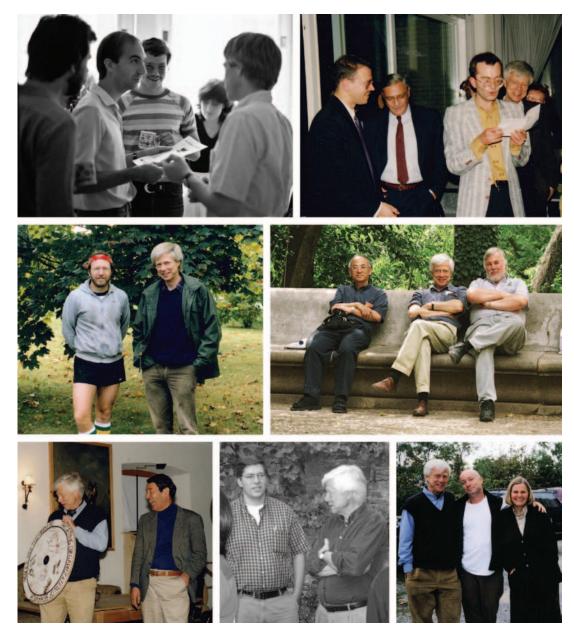




panel_03
Seventh International Symposium of Biophysics: "Genetic Dissection of *Drosophila* Behavior". The Taniguchi Foundation, Tokyo, 1981

panel_02

- 1. MH, as a postdoctoral associate in Tübingen (early 1970s).
- 2. Three of the four directors of the Max-Planck-Institute for Biological Cybernetics in Tübingen: KG Götz, K Kirschfeld, V Braitenberg (early 1970s, W Reichardt in panel 4).
- 3. KG Götz during a lab excursion.
- 4. MH and KG Götz.
- 5. Dahlem Konferenz in Berlin,1983: "The Biology of Learning" Standing left to right: MH, KF Fischbach, W Quinn, R Menzel,
- T Carew, M Lindauer, G Bicker. Seated, left to right: B Heinrich, H Markl, C Sahley, J Gould, A Wagner.
- 6. Erich Buchner (early 1980s).
- 7. The "walkers" celebrating at the end of the long (chromosomal) walk towards the identification of the omb gene. Upper row:
- S Kerscher, B Jonschker, M Heisenberg, G Pflugfelder. Below: B Poeck, J Balles.
- 8. Karl-Friedrich Fischbach as a postdoc, about 1985 in Würzburg.



panel_04

- 1. G Technau, J Blondeau, A Borst, C Götz, and MH during a coffee break (1982).
- 2. Celebration of Alexander Borst's Habilitation in the MPI for Biological Cybernetics Tübingen, 1989. Left to right: A Borst, W Reichardt, M Egelhaaf, MH.
- 3. J Hall and MH (mid 1980s).
- 4. CF Wu, MH, and R Wolf on the way up to the Alhambra (Granada), after the Alicante Neurofly meeting, Spain (2000).
- 5. MH, presenting the shooting target after M Konishi hit the bull's eye. German-American Academic Council (GAAC) meeting in Dietramszell, Germany, 1996.
- 6. In the "Pflanzgarten" (Reichenberg Castle), together with T Zars (2006).
- 7. MH, S deBelle, and Apollonia Heisenberg in front of Reichenberg Castle (ca. 2000).



$panel_05$

- 1. With G Pflugfelder at the Meeting of the Sonderforschungsbereich 554 in Retzbach, Germany (2002).
- 2. MH together with G Ferrús, G Galizia, and N Strausfeld (same occasion as in 1.)
- 3. At dinner in Shanghai, China with AK Guo, 1995.
- 4. Alumni on the occasion of MH's 65th-Birthday Symposium in Würzburg (2005): MH, KF Fischbach, B Bausenwein, R Schmid, R Böhl, K Böhl, G Pflugfelder, R Wolf, N Müller.
- 5. With Li Liu (Beijing, 2006).
- 6. Hiromu Tanimoto (Würzburg, 2008).
- 7. KG Götz and E Buchner (same occasion as in 4).

















panel_06

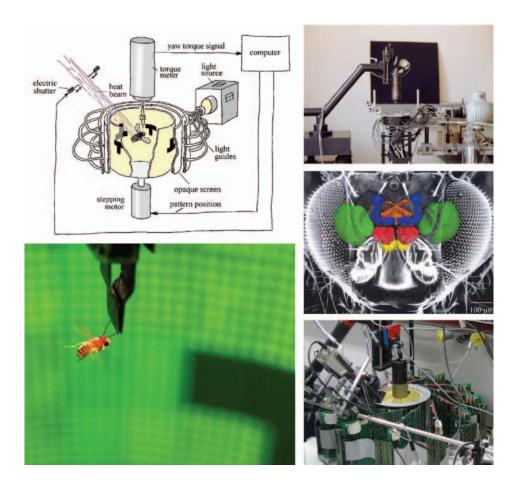
- 1. Ian Meinertzhagen and Kei Ito (Janelia Farm, 2007)
- 2. At On the lab's hiking day in 2008 with Satoko Yamaguchi
- 3. R Strauss and M Dill at MH's 65th Birthday Symposium (2005)
- 4. Antonio Prado as a postdoc in Würzburg (1998)
- 5. M. Reif, JR Martin, and G Putz (1997)
- 6. T Préat, S Waddell, B Brembs, F Christiansen-Engelhardt, K Hofmeyer (2006)
- 7. A Hofbauer, S Schneuwly and G Wustmann (2005, same occasion as 3.)
- 8. J Rister, F Bertolucci, H Scholz, B Michels, and B Gerber during a birthday celebration (2007)

panel_07 (snapshots)

- 1. ... tapping a barrel of beer at a lab picnic in 1978
- 2. Fasching (carnival) party at Reichenberg Castle. MH, E Savvateeva, G Pflugfelder, R Wolf, S Debelle (1995)
- 3. Departmental hiking day traditionally at one of the rainiest days November (mid 1990s)
- 4. and 9. T Zars and S DeBelle having fun with "Mass" (=1ltr of beer), and "Schweinshaxe" (=grilled pork knuckle) in the Würzburg beergarden (2006)
- 5. Fasching party in the seminar room. G Pflugfelder, A Pflugfelder, E Buchner, E Savvateeva. (about 2000)
- 6. Celebration of the first anniversary of the Department of Genetics (1977)
- 7. MH and S Tang in 2003, in front of the inflatable moose head, a 50th birthday gift from the lab members that has decorated his office ever since.
- 8. Lunch break. R. Strauss, T Zars, H Tanimoto, R Wolf (2006)
- 9. Lab members in a skit at MH's 60th birthday party. M Roth, S Scharf, E Wittstadt, K Hofmeyer (2000)
- 10. Role playing game at a Christmas staff party. MH impersonating G Pflugfelder, R Wolf disguised as a fly, and R Hitier (early 2000s)



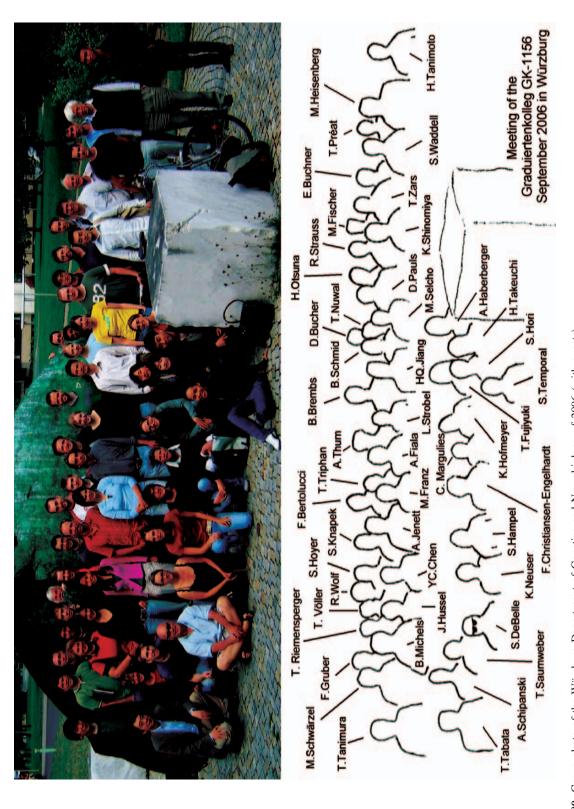
panel_07 (snapshots) (continued).



panel_08

"Evolution" of the Drosophila flight simulator.

The torquemeter ('Drehmomentkompensator') for *Drosophila* was pioneered by KG Goetz in 1963 to measure the optical properties of the compound eyes in motion vision. W Reichardt and H Wenking (1969) established a closed loop paradigm for studying ''fixation'' of landmarks in bigger flies (*Musca domestica*) using the fly's momentary yaw torque signal for driving the angular velocity of an artificial panorama. A modified design (upper right) served R Wolf in Würzburg to investigate voluntary flight control in *Drosophila*, summarized in the 'Green Book' (1984). Subsequently, M Heisenberg and R Wolf (1989) devised an operant visual learning paradigm in the flight simulator (upper left). In the recent version (lower left and right), the mechanically controlled panorama is replaced by a cylindrical screen, consisting of 8640 LEDs (developed by K Öchsner and A Eckart, Würzburg). Research with these devices helped to gain insight into the functional roles of some of the brain centers. Right middle: Scanning electron microscopy image of a *Drosophila* head with embedded 3D reconstruction of the the brain centers: optic lobes (green), mushroom bodies (blue), central complex (orange), antennal lobes (red), and suboesophageal ganglion (yellow).



panel_09 Group photo of the Würzburg Department of Genetics and Neurobiology of 2006 (with guests)

Photo Gallery Editor, Reinhard Wolf, Dept. of Genetics and Neurobiology, University of Wuerzberg