#### Botond Roska MD, PhD, Friedrich Miescher Institute Basel, Switzerland

## Education

2002-2005 Harvard Junior Fellow, Department of Genetics Harvard Medical School and Department of Molecular and Cellular Biology Harvard University, Field: Genetics and Neuroscience, Mentors: Connie Cepko and Markus Meister.

1997-2002 Graduate student, Division of Neurobiology, Department of Molecular and Cell Biology at University of California Berkeley, PhD degree (2002), Field: Neuroscience, Mentor: Frank Werblin

1995-1997 Postdoctoral Fellow, Division of Neurobiology, Department of Molecular and Cell Biology at University of California Berkeley, Field: Neuroscience, Mentor: Frank Werblin

1989-1995 Medical student, Semmelweis University of Medicine, Budapest, Hungary, MD degree (1995), Field: Medicine

# Positions

2005-today Junior Group Leader, Friedrich Miescher Institute, Basel, Switzerland.

## Honours

- 1. Fulbright Fellow (1997)
- 2. Bearden Memorial Award for biophysics (2002)
- 2. Human Frontiers Science Program Short Term Fellow (2001)
- 3. Harvard Society Fellow (2001-2005)
- 4. Human Frontiers Science Program Young Investigator (2003-2006)
- 5. Marie Curie Excellence Grant of the European Union (2006-2010)
- 6. Member of Frontiers in Genetics network, National Center of Competence in Research, Switzerland (2005)

Consultant activity

- 1. TeraOps, Inc (1998-2002)
- 2. Allergan, Inc. (2000)
- 3. Axon Instruments, Inc. (2000)

### 5. Selected publications

1. Lagali, P.S., Balya, D., Awatramani, G.B., Muench, M.A., Kim, D.S., Busskamp, V., Cepko, C.L., Roska, B. (2008) Light-activated channels targeted to ON bipolar cells restore visual function in retinal degeneration. **Nature Neuroscience** 11(6):667-75

2. Viney TJ, Balint K, Hillier D, Siegert S, Boldogkoi Z, Enquist LW, Meister M, Cepko CL, Roska B. (2007) Local retinal circuits of melanopsin-containing ganglion cells identified by transsynaptic viral tracing. **Current Biology** 5;17(11):981-8.

3. Werblin F, Roska B. (2007) The movies in our eyes. Scientific American. Apr; 296 (4):72-9

4. Roska, B; Werblin, FS. (2003) Global Shifts in Natural Scenes Block Spiking in Specific Ganglion Cell Types. **Nature Neuroscience** 6(6):600-8

5. Roska, B; Werblin, FS. (2001) Vertical Interactions across Ten Parallel Stacked Representations in the Mammalian Retina. **Nature**, 410: 583-587

6. Roska, B; Nemeth, E; Orzo, L; Werblin, FS. (2000) Three Levels of Lateral Inhibition: A Space-time Study of the Retina of the Tiger Salamander. **Journal of Neuroscience**, 20 (5): 1941-1951.

7. Roska, B; Nemeth, E; Werblin, FS. (1998) Response to change is facilitated by a three-neuron disinhibitory pathway in the tiger salamander retina. **Journal of Neuroscience**, 18(9):3451-9.