

Curriculum vitae Kai Johnsson

PERSONAL INFORMATION FOR KAI JOHNSSON

ORCID identifier: [0000-0002-8002-1981](https://orcid.org/0000-0002-8002-1981)

Nationality: German, Swiss

Date of birth: 15.10.1963

URL for web site: http://www.mpimf-heidelberg.mpg.de/13943495/chemical_biology

• EDUCATION

- | | |
|------|--|
| 1992 | PhD in Chemistry
Department of Chemistry, ETH Zürich, Switzerland |
| 1988 | Diploma in Chemistry
Department of Chemistry, ETH Zürich, Switzerland |

• CURRENT POSITION

- | | |
|--------|--|
| 2017 - | Director, Max Planck Institute for Medical Research, Heidelberg, Germany |
| 2018 - | Affiliated Professor; Institute of Chemical Sciences and Engineering, EPFL Lausanne, Switzerland |

• PREVIOUS POSITIONS

- | | |
|-------------|--|
| 2009 - 2017 | Full Professor; Institute of Chemical Sciences and Engineering, Institute of Bioengineering, EPFL Lausanne, Switzerland |
| 2005 - 2009 | Associate Professor; Institute of Chemical Sciences and Engineering, Institute of Bioengineering, EPFL Lausanne, Switzerland |
| 1999 - 2005 | Assistant Professor; Institute of Chemical Sciences and Engineering, EPFL Lausanne, Switzerland |
| 1996 - 1999 | Independent researcher; Ruhr-University Bochum, Germany |
| 1993 - 1996 | Postdoctoral fellow; Department of Chemistry, UC Berkeley, USA |

• FELLOWSHIPS AND AWARDS

- | | |
|-----------|---|
| 2022 | Family Hansen Award; Bayer Foundation |
| 2019 | Elected Member of the Heidelberg Akademie der Wissenschaften |
| 2016 | Karl-Heinz-Beckurts-Preis |
| 2015 | AbbVie Lecture, UC Berkeley |
| 2013 | Elected Member of EMBO |
| 2012-2013 | Novartis Lectureship Award |
| 2012 | <i>Leica Scientific Forum</i> Lectureship Japan (Osaka, Kyoto, Tokyo) |
| 2011 | Amgen Lecture, UC Berkeley |
| 2003 | <i>Prix APLE</i> for the invention of the year 2003 of EPFL Lausanne |

• INSTITUTIONAL RESPONSIBILITIES

- | | |
|------------|---|
| 2012 -2017 | Member of the school-wide tenure committee of EPFL. |
| 2003 -2015 | Member of the steering committee of Institute of Chemical Sciences and Engineering, EPFL |
| 2010 -2017 | Co-Director of the Swiss-wide research program NCCR Chemical Biology (budget of SFR 4 million per year) |

- **COMMISSIONS OF TRUST**

2003 -2010	Board of Directors, <i>Covalys Biosciences</i> , Switzerland
2005 -2020	Associate Editor of <i>ACS Chemical Biology</i>
2006 -	Editorial Board of <i>Chemistry&Biology</i>
2008 -	Editorial Board of <i>ChemBioChem</i>
2010 -	Editorial Board of <i>Chemical Society Reviews</i>
2012 -2020	Editorial Advisory Board of <i>Science</i>
2021 -	Executive Editor of the <i>Journal of the American Chemical Society</i>

- **MEMBERSHIPS OF SCIENTIFIC SOCIETIES**

1996 -	Member, American Chemical Society
1998 -	Member, Gesellschaft Deutscher Chemiker
2001 -	Member, Swiss Chemical Society

- **ENTREPRENEURSHIP**

2003	Co-founder of Covalys Biosciences; development of tools for protein labeling
2013	Co-founder of Quartet Medicine; development of new treatments for neuropathic pain
2014	Co-founder of Spirochome SA; development of new probes for fluorescence microscopy

- **10 REPRESENTATIVE PUBLICATIONS**

- 1) "A general strategy to develop cell permeable and fluorogenic probes for multicolour nanoscopy". Wang, L.; Tran, M.; D'Este, E.; Roberti, J.; Koch, B.; Xue, L.; Johnsson, K., *Nature Chemistry* **2020**, 12 (2), 165-172.
- 2) "Chemogenetic Control of Nanobodies" Farrants, H.; Tarnawski, M.; Muller, T. G.; Otsuka, S.; Hiblot, J.; Koch, B.; Kueblbeck, M.; Krausslich, H. G.; Ellenberg, J.; Johnsson, K., *Nat Methods* **2020**, 17 (3), 279-282.
- 3) "Semisynthetic sensor proteins enable metabolic assays at the point of care" Yu, Q.; Xue, L.; Hiblot, J.; Griss, R.; Fabritz, S.; Roux, C.; Binz, P. A.; Haas, D.; Okun, J. G.; Johnsson, K., *Science* **2018**, 361, 1122-1126
- 4) "Fluorogenic probes for live-cell imaging of the cytoskeleton" Lukinavicius, G.; Reymond, L.; D'Este, E.; Masharina, A.; Gottfert, F.; Ta, H.; Guthier, A.; Fournier, M.; Rizzo, S.; Waldmann, H.; Blaukopf, C.; Sommer, C.; Gerlich, D. W.; Arndt, H. D.; Hell, S. W.; Johnsson, K. *Nature Methods* **2014**, 11, 731
- 5) "Tetrahydrobiopterin biosynthesis as an off-target of sulfa drugs" Haruki, H.; Pedersen, M. G.; Gorska, K. I.; Pojer, F.; Johnsson, K. *Science* **2013**, 340, 987
- 6) "A near-infrared fluorophore for live-cell super-resolution microscopy of cellular proteins" Lukinavicius, G.; Umezawa, K.; Olivier, N.; Honigmann, A.; Yang, G.; Plass, T.; Mueller, V.; Reymond, L.; Correa, I. R., Jr.; Luo, Z. G.; Schultz, C.; Lemke, E. A.; Heppenstall, P.; Eggeling, C.; Manley, S.; Johnsson, K. *Nature Chemistry* **2013**, 5, 132
- 7) "An engineered protein tag for multiprotein labeling in living cells" Gautier, A.; Juillerat, A.; Heinis, C.; Correa, I. R.; Kindermann, M.; Beauflis, F.; Johnsson, K. *Chem&Biol* **2008**, 15, 128
- 8) "Specific labeling of cell surface proteins with chemically diverse compounds" George, N.; Pick, H.; Vogel, H.; Johnsson, N.; Johnsson, K. *J Am Chem Soc* **2004**, 126, 8896
- 9) "Labeling of fusion proteins with synthetic fluorophores in live cells" Keppler, A.; Pick, H.; Arrivoli, C.; Vogel, H.; Johnsson, K. *P Natl Acad Sci USA* **2004**, 101, 9955
- 10) "A general method for the covalent labeling of fusion proteins with small molecules in vivo", Keppler, A.; Gendreizig, S.; Gronemeyer, T.; Pick, H.; Vogel, H.; Johnsson, K., *Nat Biotechnol* **2003**, 21, 86