

# Dr. Kristian Rother

married, three children

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## Areas of Expertise

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### Software Development

- Published Book: “Managing Your Biological Data with Python”.
  - Doctoral degree in structural bioinformatics (managing large data bodies, 3D algorithms).
  - Familiar with Django, Flask, Numpy, PIL, Scipy, gevent, test frameworks.
  - Sample project: [iimcb.genesilico.pl/moderna](http://iimcb.genesilico.pl/moderna)
  - Basic skills in Java, C, R, HTML, CSS, JavaScript, PostgreSQL, Fortran, Pascal, and Assembler (C64).
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### Software Engineering

- Professional Scrum Master I certificate. [www.scrum.org](http://www.scrum.org).
  - Automated testing and TDD.
  - Testing of web pages with Selenium WebDriver and Selenium IDE
  - Version control with: Mercurial, Git, Bazaar, SVN
  - Agile Best Practices: Scrum, Kanban, User Stories, Pair Programming etc.
  - Published article: [“A toolbox for developing bioinformatics software”](#).
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### Training and Communication

- Vast repertoire of training methods, see [www.academis.eu/blog/tags/teaching/](http://www.academis.eu/blog/tags/teaching/).
- Toastmasters Advanced Communicator Bronze certificate [www.toastmasters.org](http://www.toastmasters.org).
- President of the Spreeredner speaking club in Berlin (2013-2014) [www.spreeredner.de](http://www.spreeredner.de).
- Commercial trainings since 2009, teaching since 2002.

## Career and Education

2010-2015	<b>Freelance trainer for software developers</b> Noble Prog <a href="http://www.nobleprog.co.uk">www.nobleprog.co.uk</a>
2011-2015	<b>Freelance trainer</b> workshops for software developers and scientists <a href="http://www.academis.eu">www.academis.eu</a>
2013-2015	<b>Lecturer in biochemistry</b> Medical School Berlin & Medical School Hamburg <a href="http://www.medicalschool-berlin.de">www.medicalschool-berlin.de</a>
2014-2015	<b>Academic Director</b> Overseas Medical Education <a href="http://www.premedicine-berlin.de">www.premedicine-berlin.de</a>
2006-2011	<b>Scientific software developer</b> development of 3D modeling software project lead & coaching junior scientists with Prof. Janusz M. Bujnicki, Warsaw, Poland <a href="http://www.genesilico.pl">www.genesilico.pl</a>
2002-2006	<b>Postgraduate studies</b> doctoral thesis at the Department of Biology, HU Berlin, thesis  <a href="#">Efficient use of a Protein Structure Annotation Database</a> (final grade: <i>magna cum laude</i> ).
1996-2002	<b>Diploma of Biochemistry</b> at the FU Berlin (final grade: <i>very good</i> ).
1996	<b>Abitur</b> at the Gymnasium Steglitz Berlin ( <i>subjects: Chemistry, Latin, Mathematics, average 1.3</i> ).

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## Languages

German	native
Finnish	native
English	expert; TOEFL certificate with 113/120 points
Polish	fluent
Latin	literacy (nine years)

# Selected Publications

## *Books*

**Managing your Biological Data with Python.** Via A, Rother K, Tramontano A. CRC Press 2014.

## *Research articles*

**Best practices in bioinformatics training for life scientists.** Blicher, Bongcam-Rudloff, Brazas et al. Brief Bioinform. 2013 Sep;14(5):528-37.

**A toolbox for developing bioinformatics software.** Rother, Potrzebowski, Puton et al. Briefings in Bioinformatics 2011.

**The complex of tmRNA-SmpB and EF-G on translocating ribosomes.** Ramrath, Yamamoto, Rother, et al. Nature. 2012 May 6;485(7399):526-9.

**Bioinformatics Training Network (BTN): a community resource for bioinformatics trainers.** Schneider, Walter, Blatter et al. Briefings in Bioinformatics 2011 Nov 22.

**RNA tertiary structure prediction with ModeRNA.** Rother, Rother, Puton et al. Brief Bioinform. 2011 Nov;12(6):601-13.

**Multi-Stage Learning Aids applied to hands-on software training.** Rother, Rother, Pleus & Upmeyer zu Belzen. Briefings in Bioinformatics 2010.

[All publications on PubMed](#)