

# Tomasz Stokowy

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Birth date: **8 December 1985**

## Education and work experience

- 2016–** **Senior Engineer (permanent position)**, Genomics Core Facility, Department of Clinical Science, University of Bergen, Norway
- 2016–2017** **Laboratory Associate at Gerstein Lab**, Yale School of Medicine, USA (prof. Mark Gerstein)
- 2014** **Visiting postdoctoral fellow at the Radboud University Medical Center**, Nijmegen, The Netherlands (prof. Alex Hoischen and prof. Christian Gilissen)
- 2013–2016** **Postdoctoral Fellow at the University of Bergen**, Norway – Department of Clinical Science in cooperation with Computational Biology Unit, Norway (prof. Vidar Steen)
- 2012–2013** **PhD practice at the University of Leipzig**, Germany (prof. Ralf Paschke)
- 2009–2013** **PhD student in Silesian University of Technology**, Automatic Control Department, Systems Engineering Group – bioinformatics specialty (prof. Krzysztof Fajarewicz)
- 2009–2013** **PhD scholarship in Department of Nuclear Medicine and Endocrine Oncology**, Maria Sklodowska-Curie Memorial Cancer Center and Institute of Oncology, Gliwice Branch (prof. Barbara Jarzab)
- 2004–2009** **Silesian University of Technology**, Gliwice, Poland – Macrofaculty – Automatic Control and Robotics, Electronics and Telecommunication, Computer Science – Information Processing for Control specialty – Master of Engineering degree

## Professional experience

- Postdoctoral project – Analysis of deep sequencing data in biomedicine
- PhD thesis – Classification of thyroid cancer subtypes
- MSc thesis – Classification of DNA microarray data with Random Forests
- 10 years of experience in large scale sensitive data analysis
- Design of data experiments
- R package development
- Teaching experience
- Organization of scientific conferences and meetings

## Skills

- Computer programming – R/bioconductor (2 own packages published), Perl, Python, JavaScript and other (automatic control/IT background from master studies)
- Comprehensive, results oriented analysis of sensitive large scale data
- Parallel computing and efficient work with computational clusters
- Driving license
- Motor boat license

## Foreign languages

- English – very good, FCE certified
- Norwegian – good, University of Bergen NOR-U3 certified
- German – good
- Russian – good
- Polish – native

## Interests

- Computer programming
- Artificial intelligence and new technologies

- Sport (volleyball, cycling, open sea fishing)
- Picking and classification of mushrooms (expert License Nr 2017 by Polish Medical Inspection)
- Music (playing guitar)

## Publications

27 publications in journals from ISI Journal list, 5 submitted manuscripts. Complete list: <http://www.ncbi.nlm.nih.gov/pubmed/?term=Stokowy>

### Most important publications:

Genetic variation in 117 myelination-related genes in schizophrenia: Replication of association to lipid biosynthesis genes.

**Stokowy T**, Polushina T, Sønderby IE, Karlsson R, Giddaluru S, Le Hellard S, Bergen SE, Sullivan PF, Andreassen OA, Djurovic S, Hultman CM, Steen VM. *Sci Rep*. 2018 May 2;8(1):6915. doi: 10.1038/s41598-018-25280-4.

Duplicated Enhancer Region Increases Expression of CTSB and Segregates with Keratolytic Winter Erythema in South African and Norwegian Families.

Ngcungcu T, Oti M, Sitek JC, Haukanes BI, Linghu B, Bruccoleri R, **Stokowy T**, Oakeley EJ, Yang F, Zhu J, Sultan M, Schalkwijk J, van Vlijmen-Willems IMJJ, von der Lippe C, Brunner HG, Erslund KM, Grayson W, Buechmann-Moller S, Sundnes O, Nirmala N, Morgan TM, van Bokhoven H, Steen VM, Hull PR, Szustakowski J, Staedtler F, Zhou H, Fiskerstrand T, Ramsay M. *Am J Hum Genet*. 2017 May 4;100(5):737-750. doi: 10.1016/j.ajhg.2017.03.012. Epub 2017 Apr 27.

BRCA Testing by Single-Molecule Molecular Inversion Probes.

Neveling K, Mensenkamp AR, Derks R, Kwint M, Ouchene H, Steehouwer M, van Lier B, Bosgoed E, Rikken A, Tychon M, Zafeiropoulou D, Castelein S, Hehir-Kwa J, Tjwan Thung D, Hofste T, Lelieveld SH, Bertens SM, Adan IB, Eijkelenboom A, Tops BB, Yntema H, **Stokowy T**, Knappskog PM, Høberg-Vetti H, Steen VM, Boyle E, Martin B, Ligtenberg MJ, Shendure J, Nelen MR, Hoischen A. *Clin Chem*. 2017 Feb;63(2):503-512. doi: 10.1373/clinchem.2016.263897. Epub 2016 Dec 14.

Two-miRNA classifiers differentiate mutation-negative follicular thyroid carcinomas and follicular thyroid adenomas in fine needle aspirations with high specificity.

**Stokowy T**, Wojtas B, Jarzab B, Krohn K, Fredman D, Dralle H, Musholt T, Hauptmann S, Lange D, Hegedüs L, Paschke R, Eszlinger M. *Endocrine*. 2016 Jul 29. [Epub ahead of print]

RareVariantVis: new tool for visualization of causative variants in rare monogenic disorders using whole genome sequencing data.

**Stokowy T**, Garbulowski M, Fiskerstrand T, Holdhus R, Labun K, Sztromwasser P, Gilissen C, Hoischen A, Houge G, Petersen K, Jonassen I, Steen VM. *Bioinformatics*. 2016 Jun 10. pii: btw359. [Epub ahead of print]

Somatic mutation profiling of follicular thyroid cancer by next generation sequencing.

Swierniak M, Pfeifer A, **Stokowy T**, Rusinek D, Chekan M, Lange D, Krajewska J, Oczko-Wojciechowska M, Czarniecka A, Jarzab M, Jarzab B, Wojtas B. *Mol Cell Endocrinol*. 2016 Sep 15;433:130-7. doi: 10.1016/j.mce.2016.06.007. Epub 2016 Jun 6.

A two miRNA classifier differentiates follicular thyroid carcinomas from follicular thyroid adenomas.

**Stokowy T**, Wojtaś B, Krajewska J, Stobiecka E, Dralle H, Musholt T, Hauptmann S, Lange D, Hegedüs L, Jarzab B, Krohn K, Paschke R, Eszlinger M. *Mol Cell Endocrinol*. 2015 Jan 5;399:43-9. doi: 10.1016/j.mce.2014.09.017. Epub 2014 Sep 26.

Differential miRNA expression defines migration and reduced apoptosis in follicular thyroid carcinomas.

Wojtas B, Ferraz C, **Stokowy T**, Hauptmann S, Lange D, Dralle H, Musholt T, Jarzab B, Paschke R, Eszlinger M. *Mol Cell Endocrinol*. 2014 May 5;388(1-2):1-9. doi: 10.1016/j.mce.2014.02.011. Epub 2014 Mar 12. Review.

Analysis options for high-throughput sequencing in miRNA expression profiling.

**Stokowy T**, Eszlinger M, Świerniak M, Fajarewicz K, Jarzab B, Paschke R, Krohn K. *BMC Res Notes*. 2014 Mar 13;7:144. doi: 10.1186/1756-0500-7-144.

miRNAs with the potential to distinguish follicular thyroid carcinomas from benign follicular thyroid tumors: results of a meta-analysis.

**Stokowy T**, Wojtaś B, Fajarewicz K, Jarzab B, Eszlinger M, Paschke R. *Horm Metab Res*. 2014 Mar;46(3):171-80. doi: 10.1055/s-0033-1363264. Epub 2014 Jan 20.

## Awards

- Golden helix award for poster presentation at Polish Genetics Congress, Poznań, September 2013
- European Thyroid Association Congress 2012 Travel Grant Award for the work entitled 'RNA-Seq provides isoform specific miRNA expression data which require isoform qPCR verification'
- Winner of ISMB SCS Congress 2012 EMBL-EBI travel fellowship (Los Angeles, 2012 <http://symposium.iscbsc.org/content/travel-fellowships>) for the work entitled 'RNA-Seq reveals usefulness of small RNA isoforms in thyroid tumors diagnosis'
- First place in 'Doktoris' PhD student fellowship program, organized by Silesia Region in category Medical Technologies
- 2 awards for presentation and article presented during International PhD workshop in Wisla, 2011 entitled 'Selection of differentiating features in RNA-Sequencing of thyroid cancer samples': Award of Centre of Education in Mechatronics and Distinction of Young Experts Committee
- Distinction during the School of Molecular Medicine (Warsaw) reporting sessions for the talk entitled 'Molecular markers of thyroid cancer: bioinformatics advances and challenges'

## **Additional administration activities**

- Genomics Club administration and organization at the University of Bergen
- Organization of Bioinformatics in Bergen conference 2015
- Organization of ISMB Student Council Symposium, Berlin 2013 (Co-chairman)
- Co-chairmen of School of Molecular Medicine reporting session, Warsaw, October 2012

## **Scholarships, grants, participation in international projects**

- Bergen Medical Research Foundation – postdoctoral fellowship (3 years)
- CancellCancer: Prevention of Cancer Disease Development through Health Education. Role: partner. Funded by EEA Grants Poland. Funds allocation: 45400 Euro. Cancell Cancer application is available in Google Play and AppStore in three languages: Polish, English and Norwegian.
- Foundation of Polish Science Scholarship in the program: International PhD Studies, in collaboration of Silesian University of Technology, Gliwice, Poland, Cancer Center and Institute of Oncology, Gliwice, Poland and Universitaetsklinikum Leipzig, Germany
- Foundation of Polish Science – MPD, Skills and Inter programs
- 'Bioinformatics' PhD studies at Silesian University of Technology organized within 7<sup>th</sup> Framework Programme of European Union
- Boehringer Ingelheim travel grant for 3 months of stay in Leipzig University
- Scholarship for the best 20% of PhD students at Silesian University of Technology (2010–2013)
- Work with Elixir Biomedical Node (European research infrastructure) in Norway
- Work in Norwegian Genomics Consortium, Bergen node
- Work with NORMENT (Norwegian Center for Mental Disorders Research)

## **Scientific workshops attendance**

- Lipari School – Computational genomics and personalized medicine, Lipari, Italy (2014,2017)
- Scientific English course – Advices on Academic Writing – Bergen, Norway (February 2014)
- Presentation of scientific content for various audience types, organized by Foundation of Polish Science in Warsaw, Poland (May 2012)
- Computational clusters administrator and users course, organized by Wasco company in Gliwice, Poland (March 2011)
- Integrative analysis of genome scale data – Cold Spring Harbor Laboratory, NY, USA (June 2010)
- Delay equations and structured population models – Basque Center for Applied Mathematics, Derio, Spain (January 2010)
- Microarray data analysis workshop, Warsaw, Poland (October 2009)

## **Invited lectures and meetings**

- Invited lectures at School of Molecular Medicine meeting, Warsaw, 2012-2018
- Oral presentation at Genome Informatics (Grace Auditorium), November 2015, Cold Spring Harbor, USA

## **Teaching**

- Silesian University of Technology, Gliwice, Poland, for Automatic Control students: Artificial Intelligence, Optimization and Decision Making (4 years)
- University of Bergen, Norway, Medicine Faculty students: Human Molecular Genetics (3 years)