Csaba Kiss

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Summary

An accomplished molecular biologist with over 20 years of experience with proven interdisciplinary knowledge of computational sciences. Strenghts include molecular technology development inlcuding in vitro display system, automation and database driven software development and python scripting.

Relevant Skills

- Developed database driven web applications (php-mysql-javascript-dhtmlx)
- Skilled python programmer
- Experienced linux system administrator
- Excellent verbal and written communication skills

Areas of Expertise

- Published over 30 peer reviewed scientific papers in various international journals
- Strengths in technology development
- Automation and bioinformatics
- Experienced leader and team worker.

Employment

Los Alamos National Laboratory, Los Alamos, NM
Team Leader, 2012 - Present
Team Leader in the B10 Biosecurity and Public Health Group
Developed new software package for the analysis of antibody deep sequencing data.

Los Alamos national Laboratory, Los alamos, NM
Scientist 2, 2008 - 2011
Member of the Bradbury phage display group
Collaborated with CINT on the development of novel elastin based bionanomaterials.
Developed new library creation techniques.

Los Alamos National Laboratory, Los Alamos, NM
Post-Doctoral Fellow, 2004 - 2007
Developed a general method to ultra thermostabilize proteins (published and patented).

Karolinska Institute, Stockholm, Sweden
PhD student, 1995 - 2003
Member of the EBV Research group with the lead of Professor George Klein focusing on identification of EBV transforming genes by high-throughput gene-expression analysis with cDNA chips.

Education

Ph.D., Tumorbiology, 2003
Karolinska Institute, Stockholm, Sweden

Master of Science, Biological Engineering, 1994
Tech. University of Budapest , Hungary

Bachelor of Science, Chemical Engineering, 1991
Tech. University of Budapest, Hungary

Professional Training

Vanderbilt University, Nashville, TN
Rosetta course, 2014 - 2014
Participated on a wee- long protein folding, design and modelling course

Beckman Coulter, Brea, CA
Advanced liquid handling course, 2012 - 2012
Got certified for advanced automation programming with the Biomek FX liquid handling robot.

Cambridge Antibody Technology, Cambridge, England
Guest Researcher, 2005 - 2005
Acquired the skill of Ribosome Display, which is only used in 3 laboratories in the world

Hokkaido University, Sapporo, Japan
Invited Guest Researcher, 1999 - 1999
Designed and built molecular targeting construct for homologous recombination of Epstein Barr virus by puromycin selection marker

DeMonfort University, Leicester, England
Guest Student, 1994 - 1994
Awarded a 6-month scholarship to prepare Master thesis on the analysis of cell cycle specific genes in sugar beet by PCR and Northern hybridization

Tom Baker Cancer Center, Calgary, Canada
Summer Student, 1992 - 1992
Awarded a 4-month stipendium at the Tom Baker Cancer Center, Calgary, Canada; where cloned and sequenced a liver specific alpha-fetoprotein

Languages

- English, fluent
- Hungarian, mother-tongue
- Swedish, good
- Russian, basic

Invited Speaker for Conferences

2012
Antibody Engineering, San Diego, CA
Sequence Analysis of Antibody Libraries and Selections using Ion Torrent Technology

2014
PepTalk 2014, Palm Springs, CA
The AbMining ToolBox: An Open Source Tool for the Rapid Analysis of Antibody Repertoires

2014
Sequencing, Finishing, and Analysis in the Future Meeting, Santa Fe, NM
The AbMining ToolBox: An Open Source Tool for the Rapid Analysis of Antibody Repertoires

Peer Reviewed Publications

1 S. D'Angelo, J. Glanville, F. Ferrara, L. Naranjo, C. D. Gleasner, X. Shen, A. R. Bradbury, and C. **Kiss**, 'The Antibody Mining Toolbox: An Open Source Tool for the Rapid Analysis of Antibody Repertoires', *MAbs,* 6 (2014), 160-72.

2 F. Ferrara, L. A. Naranjo, S. D'Angelo, C. **Kiss**, and A. R. Bradbury, 'Specific Binder for Lightning-Link(R) Biotinylated Proteins from an Antibody Phage Library', *J Immunol Methods,* 395 (2013), 83-7.

3 Jason J Han, Csaba **Kiss**, Andrew RM Bradbury, and James H Werner, 'Time-Resolved, Confocal Single Molecule Tracking of Individual Organic Dyes and Fluorescent Proteins in Three Dimensions', *ACS nano* (2012).

4 C. D. Paul, D. A. Traore, E. Byres, J. Rossjohn, R. J. Devenish, C. **Kiss**, A. Bradbury, M. C. Wilce, and M. Prescott, 'Expression, Purification, Crystallization and Preliminary X-Ray Analysis of Ecgp123, an Extremely Stable Monomeric Green Fluorescent Protein with Reversible Photoswitching Properties', *Acta Crystallogr Sect F Struct Biol Cryst Commun,* 67 (2011), 1266-8.

5 S. D'Angelo, N. Velappan, F. Mignone, C. Santoro, D. Sblattero, C. **Kiss**, and A. R. Bradbury, 'Filtering "Genic" Open Reading Frames from Genomic DNA Samples for Advanced Annotation', *BMC Genomics,* 12 Suppl 1 (2011), S5.

6 N. Velappan, H. E. Fisher, E. Pesavento, L. Chasteen, S. D'Angelo, C. **Kiss**, M. Longmire, P. Pavlik, and A. R. Bradbury, 'A Comprehensive Analysis of Filamentous Phage Display Vectors for Cytoplasmic Proteins: An Analysis with Different Fluorescent Proteins', *Nucleic Acids Res,* 38 (2010), e22.

7 C. **Kiss**, J. Temirov, L. Chasteen, G. S. Waldo, and A. R. Bradbury, 'Directed Evolution of an Extremely Stable Fluorescent Protein', *Protein Eng Des Sel,* 22 (2009), 313-23.

8 N. Velappan, J. Clements, C. **Kiss**, R. Valero-Aracama, P. Pavlik, and A. R. Bradbury, 'Fluorescence Linked Immunosorbant Assays Using Microtiter Plates', *J Immunol Methods,* 336 (2008), 135-41.

9 M. Dai, J. Temirov, E. Pesavento, C. **Kiss**, N. Velappan, P. Pavlik, J. H. Werner, and A. R. M. Bradbury, 'Using T7 Phage Display to Select Gfp Based Binders', *JMB* (2008).

10 M. Goldsmith, C. **Kiss**, A. R. Bradbury, and D. S. Tawfik, 'Avoiding and Controlling Double Transformation Artifacts', *Protein Eng Des Sel* (2007).

11 M. Dai, H. E. Fisher, J. Temirov, C. **Kiss**, M. E. Phipps, P. Pavlik, J. H. Werner, and A. R. Bradbury, 'The Creation of a Novel Fluorescent Protein by Guided Consensus Engineering', *Protein Eng Des Sel,* 20 (2007), 69-79.

12 C. **Kiss**, H. Fisher, E. Pesavento, M. Dai, R. Valero, M. Ovecka, R. Nolan, M. L. Phipps, N. Velappan, L. Chasteen, J. S. Martinez, G. S. Waldo, P. Pavlik, and A. R. Bradbury, 'Antibody Binding Loop Insertions as Diversity Elements', *Nucleic Acids Res,* 34 (2006), e132.

13 J. Nishikawa, L. L. Kis, A. Liu, X. Zhang, M. Takahara, K. Bandobashi, C. **Kiss**, N. Nagy, K. Okita, G. Klein, and E. Klein, 'Upregulation of Lmp1 Expression by Histone Deacetylase Inhibitors in an Ebv Carrying Npc Cell Line', *Virus Genes,* 28 (2004), 121-8.

14 J. Nishikawa, C. **Kiss**, S. Imai, K. Takada, K. Okita, G. Klein, and L. Szekely, 'Upregulation of the Truncated Basic Hair Keratin 1(Hhb1-Deltan) in Carcinoma Cells by Epstein-Barr Virus (Ebv)', *Int J Cancer,* 107 (2003), 597-602.

15 C. **Kiss**, J. Nishikawa, K. Takada, P. Trivedi, G. Klein, and L. Szekely, 'T Cell Leukemia I Oncogene Expression Depends on the Presence of Epstein-Barr Virus in the Virus-Carrying Burkitt Lymphoma Lines', *Proc Natl Acad Sci U S A,* 100 (2003), 4813-8.

16 C. **Kiss**, J. Nishikawa, A. Dieckmann, K. Takada, G. Klein, and L. Szekely, 'Improved Subtractive Suppression Hybridization Combined with High Density Cdna Array Screening Identifies Differentially Expressed Viral and Cellular Genes', *J Virol Methods,* 107 (2003), 195-203.

17 E. Kashuba, K. Mattsson, K. Pokrovskaja, C. **Kiss**, M. Protopopova, B. Ehlin-Henriksson, G. Klein, and L. Szekely, 'Ebv-Encoded Ebna-5 Associates with P14arf in Extranucleolar Inclusions and Prolongs the Survival of P14arf-Expressing Cells', *Int J Cancer,* 105 (2003), 644-53.

18 K. Pokrovskaja, B. Ehlin-Henriksson, C. **Kiss**, A. Challa, J. Gordon, P. Gogolak, G. Klein, and L. Szekely, 'Cd40 Ligation Downregulates Ebna-2 and Lmp-1 Expression in Ebv-Transformed Lymphoblastoid Cell Lines', *Int J Cancer,* 99 (2002), 705-12.

19 K. Mattsson, C. **Kiss**, G. M. Platt, G. R. Simpson, E. Kashuba, G. Klein, T. F. Schulz, and L. Szekely, 'Latent Nuclear Antigen of Kaposi's Sarcoma Herpesvirus/Human Herpesvirus-8 Induces and Relocates Ring3 to Nuclear Heterochromatin Regions', *J Gen Virol,* 83 (2002), 179-88.

20 H. Kiss, Y. Yang, C. **Kiss**, K. Andersson, G. Klein, S. Imreh, and J. P. Dumanski, 'The Transcriptional Map of the Common Eliminated Region 1 (C3cer1) in 3p21.3', *Eur J Hum Genet,* 10 (2002), 52-61.
21 H. Kiss, E. Darai, C. **Kiss**, M. Kost-Alimova, G. Klein, J. P. Dumanski, and S. Imreh, 'Comparative Human/Murine Sequence Analysis of the Common Eliminated Region 1 from Human 3p21.3', *Mamm Genome,* 13 (2002), 646-55.
22 C. **Kiss**, M. Kost-Alimova, G. Klein, and L. Szekely, 'Optimisation of the Degenerate Oligonucleotide Primed Pcr (Dop-Pcr) for Capillary Thermocycler', *Biomol Eng,* 19 (2002), 31-4.
23 K. Mattsson, K. Pokrovskaja, C. **Kiss**, G. Klein, and L. Szekely, 'Proteins Associated with the Promyelocytic Leukemia Gene Product (Pml)-Containing Nuclear Body Move to the Nucleolus Upon Inhibition of Proteasome-Dependent Protein Degradation', *Proc Natl Acad Sci U S A,* 98 (2001), 1012-7.
24 A. Maeda, C. **Kiss**, F. Chen, B. Ehlin-Henriksson, N. Nagy, L. Szekely, K. Takada, E. Klein, and G. Klein, 'Ebna Promoter Usage in Ebv-Negative Burkitt Lymphoma Cell Lines Converted with a Neomycin-Resistant Ebv Strain', *Int J Cancer,* 93 (2001), 714-9.
25 H. Kiss, D. Kedra, C. **Kiss**, M. Kost-Alimova, Y. Yang, G. Klein, S. Imreh, and J. P. Dumanski, 'The Lztfl1 Gene Is a Part of a Transcriptional Map Covering 250 Kb within the Common Eliminated Region 1 (C3cer1) in 3p21.3', *Genomics,* 73 (2001), 10-9.
26 L. Szekely, C. **Kiss**, K. Mattsson, E. Kashuba, K. Pokrovskaja, A. Juhasz, P. Holmvall, and G. Klein, 'Human Herpesvirus-8-Encoded Lna-1 Accumulates in Heterochromatin- Associated Nuclear Bodies', *J Gen Virol,* 80 (Pt 11) (1999), 2889-900.
27 J. Li, A. I. Protopopov, R. Z. Gizatullin, C. **Kiss**, V. I. Kashuba, G. Winberg, G. Klein, and E. R. Zabarovsky, 'Identification of New Tumor Suppressor Genes Based on in Vivo Functional Inactivation of a Candidate Gene', *FEBS Lett,* 451 (1999), 289-94.
28 H. **Kiss**, D. Kedra, Y. Yang, M. Kost-Alimova, C. **Kiss**, K. P. O'Brien, I. Fransson, G. Klein, S. Imreh, and J. P. Dumanski, 'A Novel Gene Containing Lim Domains (Limd1) Is Located within the Common Eliminated Region 1 (C3cer1) in 3p21.3', *Hum Genet,* 105 (1999), 552-9.
29 C. **Kiss**, J. Li, A. Szeles, R. Z. Gizatullin, V. I. Kashuba, T. Lushnikova, A. I. Protopopov, M. Kelve, H. **Kiss**, I. D. Kholodnyuk, S. Imreh, G. Klein, and E. R. Zabarovsky, 'Assignment of the Arha and Gpx1 Genes to Human Chromosome Bands 3p21.3 by in Situ Hybridization and with Somatic Cell Hybrids', *Cytogenet Cell Genet,* 79 (1997), 228-30.
30 A. I. Protopopov, R. Z. Gizatullin, N. V. Vorobieva, M. V. Protopopova, C. **Kiss**, V. I. Kashuba, G. Klein, L. L. Kisselev, A. S. Graphodatsky, and E. R. Zabarovsky, 'Human Chromosome 3: High-Resolution Fluorescence in Situ Hybridization Mapping of 40 Unique Noti Linking Clones Homologous to Genes and Cdnas', *Chromosome Res,* 4 (1996), 443-7.
31 Bori Kucsera M., Z.,**Kiss**, C., Zabarovsky, E.R., Marcsek, Z., 'Expression of Genes Located on Chromosome 3 in Quiescent and Proliferating Fibroblast Cell Line Wi-38.', *In Vitro,* 28 (1992), 148.

Patents

1 Andrew M Bradbury, Csaba **Kiss**, Sara D'Angelo, Fortunato Ferrara, Leslie A Naranjo, and Tiziano Gaiotto, 'Recombinant Renewable Polyclonal Antibodies', ed. by US Patent (US: 2013).
2 Andrew M Bradbury, Geoffrey S Waldo, Csaba **Kiss**, and Devin Close, 'Fluorobodies: Intrinsically Fluorescent Binding Ligands', ed. by US Patent (US: 2012).
3 Andrew M Bradbury, Geoffrey S Waldo, and Csaba **Kiss**, 'Highly Thermostable Fluorescent Proteins', ed. by US Patent (USA: 2011).

Book Chapters

1. **Kiss**, C., *Reverse Transcriptase-PCR*, in *Wiley Encyclopedia of Molecular Medicine, 5 Volume Set*, R.A. Meyers, Editor. 2002, John Wiley & Sons, Inc.: New York. p. 2790.
2. **Kiss**, C., *PCR (Polymerase Chain Reaction)*, in *Wiley Encyclopedia of Molecular Medicine*, R.A. Meyers, Editor. 2002, John Wiley & Sons, Inc.: New York. p. 2422-2426.