

Dear Human Resources,

I am writing this letter to apply for opening *Faculty* position in Systems Biology/Microbiology at the Indiana University.

I have Ph.D. in Genetics and Biotechnology. I am currently working as visiting fellow in the Gene Regulation and Chromosome Biology Laboratory, National Cancer Institute, NIH, Frederick, MD. In this Lab I focus my research interest on the plasmid partition process in human pathogenic bacterial strains. I investigate the role of Par proteins in the active plasmid segregation and identify the genetic elements defining partition species specificity in the different type of plasmids. In the frame of this project and my previous scientific job I gained a strong background in molecular biology, genetics, microbiology and biochemistry. I apply my strong working knowledge and extensive hands-on experience in a number of general and highly specified methods using different experimental and analytical equipment (λ Red-mediated recombination, high-throughput P1 transduction, λ InCh-mediated gene transfer, single- and multi-site directed mutagenesis, hybrid protein gene expression, GFP-fusion genes technology, DNA sequencing, time-lapse fluorescent photomicroscopy, flow cytometry etc.).

For best introduction please find my attached CV, including a statement of research and teaching interests, List of Publications and names of three professional references.

Sincerely yours,

Alena Dabrazhynetskaya

A handwritten signature in black ink, appearing to read 'Alena Dabrazhynetskaya', written in a cursive style.

ALENA DABRAZHYNetskAYA

LIST OF PUBLICATIONS

Peer-reviewed articles (in English)

Dabrazhynetskaya A., Sergueev K. and Austin S. (2005). Species and incompatibility determination within the P1*par* family of plasmid partition elements. *Journal of Bacteriology*. 187(17):5977-5983.

Sergueev K., **Dabrazhynetskaya A.** and Austin S. (2005). A plasmid partition system of the P1*par* family from the pWR100 virulence plasmid of *Shigella flexneri*. *Journal of Bacteriology*. 187(10):3369-3373.

Li Y., **Dabrazhynetskaya A.**, Youngren B. and Austin S. (2004). The role of Par proteins in the active segregation of the P1 plasmid. *Molecular Microbiology*. **53** (1), 93-102.

Peer-reviewed articles (in Russian)

Maksimova N.P., **Dobrozhinetskaya E.V.**, Fomichev Yu.K. (2000). Control of aromatic amino acid biosynthesis in an obligate methylotrophic bacterium *Methylobacillus mucogenes* M75. *Russian Academy of Science News. Biol.* **4**, 428-436. Russian.

Dobrozhinetskaya E.V., Maksimova N.P., Fomichev Yu.K. (1996). Regulation of tryptophan biosynthesis in obligate methylotrophic bacterium *Methylobacillus mucogenes*. *Genetika*. **32** (8), 1056-1060. PMID: [PubMed - indexed for MEDLINE].

Dobrozhinetskaya E.V., Scherba V.V., Maksimova N.P. An application of *Methylobacillus mucogenes* M75 bacteria for methanol utilization. *Biotechnologia*. 1995. N 5-6. pp. 30-32. Russian.

Dobrozhinetskaya E.V., Maksimova N.P. The new obligate methylotrophic bacterium *Methylobacillus mucogenes* M75 identification. (1994). *Vestnik BGU. Biology*. # 3, 32-36. Russian.

Maksimova N.P., **Dobrozhinetskaia E.V.**, Fomichev Yu.K. (1990). Regulation of phenylalanine biosynthesis in an obligate methylotroph *Methylobacillus* M75. *Mol Gen Microbiol Virusol*. **10**, 28-30. PMID: 1979836 [PubMed - indexed for MEDLINE].

ABSTRACTS in Russian:

Maksimova N.P., Lysak V.V., Komarova M.S., **Dobrozhinetskaya E.V.**, Baeva I., Maslak D. and Sadovskaya L. (2000). Baktogen-3 is a new high effective preparation for plant protection. International Practical Seminar. Grodno, Belarus. November 13-16, 48-53.

Dobrozhinetskaya E.V. (2000). An application of *Methylobacillus mucogenes M75* bacteria for environment refining from methanol pollution. International Conference "Ksenobiotics and Living Systems". Minsk, Belarus. November 1-3, V.2, 101-102.

Dobrozhinetskaya E.V. and Maksimova N.P. (1998). L-Phenylalanine metabolism in the *Pseudomonas putida M* bacterium. International Conference "Microbiology and Biotechnology Problems". Minsk, Belarus, November 25-27, 38-41.

Dobrozhinetskaya E.V. and Maksimova N.P. (1998). Bacterial strain *Methylobacillus sp. M75* used as a test-culture for methanol and methylamine identification. International Conference "Molecular Genetics and Biotechnology". Minsk, Belarus, April 6-8, 175-180.

Dobrozhinetskaya E.V. and Maksimova N.P. (1996). An application of *Methylobacillus mucogenes M75* bacteria for methanol utilization. A.A. Baev Tribute International Conference. Moscow, Russia, June 20-22, 23-29.