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| GENERAL INFORMATION |
| 1. **NAME OF THE CENTER AND LOCATION**
 |
|  | *Laboratory of Experimental Immunotherapy, Institute of Microbiology, Bulgarian Academy of Sciences* |
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| 1. **TYPE OF THE RESEARCH INFRASTRUCTURE AND/OR SCIENTIFIC EXPERTISE**
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| Identify the type of the RI, equipment/facilities/ specific research, and in particular linked to COVID-19: | Cell Culture, Molecular Biology, Peptide Microarrays, Flow CytometryKEY WORDS: Igome, antibody repertoire, phage display, peptide microarray, mimotope vaccines |
| 1. **TYPE OF THE RESEARCH**
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| Provide information on the research carried on or planned in regard with COVID-19 and other viruses  | Prediction of antibody epitopes based on mimotopes of B cell precursors |
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| 1. **WEBSITE**
 |
| Provide the internet address: | *<http://microbio.bas.bg/wordpress/index.php/en/structure/scientific-staff/department-of-immunology/laboratory-of-experimental-immunotherapy/>*  |
| 1. **BACKGROUND, PUBLICATIONS AND OPEN DATA REPOSITORY**
 |
| leading research team AND Scientific publications of the research group on the topics of related to coronaviruses research results**;****link to open data repository**  | 1. A. Pashov, V. Shivarov, M. Hadzhieva, V. Kostov, D. Ferdinandov, K.-M. Heintz, S. Pashova, M. Todorova, T. Vassilev, T. Kieber-Emmons, L. A. Meza-Zepeda, E. Hovig. "Diagnostic Profiling of the Human Public IgM Repertoire With Scalable Mimotope Libraries". Frontiers in Immunology, 10, 2019.2. S. Pashova, C. Schneider, S. von Gunten, A. Pashov. "Antibody repertoire profiling with mimotope arrays". Human vaccines & immunotherapeutics, 13, 314-322. 2017.3. C. Schneider, D. F. Smith, R. D. Cummings, K. F. Boligan, R. G. Hamilton, B. S. Bochner, S. Miescher, H.-U. Simon, A. Pashov, T. Vassilev, S. von Gunten. "The human IgG anti-carbohydrate repertoire exhibits a universal architecture and contains specificity for microbial attachment sites". Science Translational Medicine, 7, 269ra261. 2015.4. S. Garimalla, T. Kieber-Emmons, A. D. Pashov. "The Patterns of Coevolution in Clade B HIV Envelope's N-Glycosylation Sites". PLoS ONE, 10, e0128664. 2015.5. A. D. Pashov, J. Plaxco, S. V. Kaveri, B. Monzavi-Karbassi, D. Harn, T. Kieber-Emmons. "Multiple antigenic mimotopes of HIV carbohydrate antigens: relating structure and antigenicity". J Biol Chem, 281, 29675-29683. 2006.**6. V. Shivarov, P. Petrov, A. Pashov. "SARS-CoV2 Preimmune IgM Epitopes". [submitted]** **Patent Application №PTBG202000000158635/01.04.2020 “SARS-CoV-2 Specific B Cell Epitopes”** |
| 1. **COORDINATOR**
 |
|  | *Assoc. Prof. Anastas Pashov* |
| *e-mail:* *a\_pashov@microbio.bas.bg* |
| *Tel:+359 2 979 6348* |
| 1. **POSIBLE PARTNERS**
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| Indicate the partner organizations | **NA** |
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1. **IMPLEMENTED AND RUNNING PROJECTS**

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| Projects related to virology, vaccines, infection diseases … |

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| Proteomic Analysis of the Repertoire of IgM antibodies in Patients with Brain Tumors, NSF, DN01-11/16.12.2016 |

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