

MARK GOMELSKY

2-page CV

Professor of Molecular Biology
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<https://scholar.google.com/citations?user=EBV-dIEAAAJ&hl=en>

EDUCATION

- 1991 Ph.D. Biological Sciences (Microbial Genetics). Institute of Genetics and Selection of Industrial Microorganisms, Moscow, Russia.
1988 B.S./M.S. Industrial Microbiology (*Summa cum Laude*). Moscow Institute of Chemical Technology, Moscow, Russia.

PROFESSIONAL EXPERIENCE

- 1999-present Professor (1999, Assistant; 2005, Associate; 2011, Full Professor). Dept. of Molecular Biology, University of Wyoming, Laramie, WY.
1993-99 Postdoctoral Research Fellow. Dept. of Microbiology and Molecular Genetics, University of Texas Medical School, Houston, TX.
1992 Visiting Scientist. Unit of Regulation of Gene Expression, Institut Pasteur, Paris, France.
1991-92 Junior Research Scientist. State Research Institute of Genetics and Selection of Industrial Microorganisms, Moscow, Russia.

Sabbaticals:

- 2015 Dept. of Microbiology, Tumor and Cell Biology, Karolinska Institute, Stockholm, Sweden.
2007 Dept. of Biomolecular Mechanisms, Max Planck Institute for Medical Research, Heidelberg, Germany.

TEACHING (*current*)

- 2021-present (team-taught) MOLB4053 Communications in Molecular Biology (3 CR)
2016-present MOLB5057 Microbial and Synthetic Biology (2 CR)
2011-present MOLB4460/5460 Microbial Physiology and Metabolism (3 CR)

AWARDS AND HONORS (*last 5 years*)

- 2020 Society for Biological Engineering (SBE) Excellence and Service as Conference Chair of Optogenetic Technologies and Applications.
2019 American Society for Microbiology (ASM) Distinguished service as an Editorial Board Member of *J Bacteriol*.
2018 Excellence in Research Award, UW College of Agriculture and Natural Resources.
2017 Elected Fellow of American Association for the Advancement of Science (AAAS).
2017 13th Intl Conference on Tetrapyrrole Photoreceptors of Photosynthetic Organisms. Keynote.
2017 American Society for Microbiology (ASM) Distinguished Service on the Editorial Board of *Appl Environ Microbiol*.
2016 Jack Kenney Award for Outstanding Service for *J Bacteriol*.
2016 Two papers selected among 120 most influential studies published in *J Bacteriol* in 1916-2015.

FUNDING (*current*)

- NIH R21 AG0728031. 4/2021-3/2023. Delaying cognitive decline in mouse models of Alzheimer's disease via near-infrared light optogenetics. Sun QQ, Gomelsky M, MPI.
- NIH R21 CA249814-01A1. 1/2021-12/2022. Remotely controlled listerial bactodrones for cancer immunotherapy. Gomelsky M, Gigley J, MPI.
- NIH P20 GM121310. 8/2020-7/2021. Wyoming Sensory Biology Center. Supplement. Sun QQ, PI; Gomelsky M, co-Investigator.
- USDA-NIFA-AFRI-1946224 8/2020-8/2023. Listeria-plant biofilms. Gomelsky M, PI.

- ◆ NSF ENG 2015849. 7/2020-6/2023. Collaborative Research: Near-infrared light-controlled beta-cells. Gomelsky M, Tzanakakis ES, PIs.

MENTORSHIP

Postdoctoral research associates: Elbakush A (2018-19). Lab Chief. Center for Infectious Disease Control, Lybia; Qian G (2015-16). Professor, Nanjing Agricultural Univ., China; Chen L (2010-11). Assoc. Professor, Inner-Mongolian Agricultural Univ., China; Guvener ZT (2010-11). Senior Scientist, Caribu Biosciences; Siltberg-Liberles J (2008-09). Assoc. Prof., Florida International Univ.; Ryjenkov DA (2006-07). Director, Cell Biology Lab, ChemDiv, Russia; Moskvina O (2002-10). Senior Scientist, Wilmar Inc., Singapore; Tarutina M (2001-05). Senior Research Scientist, Ajinomoto-Genetika, Russia; Sram J (2001-02). Vice President, Business Development and Sales, Fulgent Genomics, CA.

Graduate students

Current: S. Freeman (since 2019); J. Carr (since 2020); O. Trunschke (since 2020); K. Tran (since 2021).
Ph.D. (completed): Fomicheva A (2013-18): Postdoc at Colorado State Univ.; Elbakush A (2013-17): Postdoc, Univ. Wyoming; returned to Lybia; Fang X (2006-14): Postdoc at Emory Univ.; Ryu MH (2007-13): Postdoc at MIT; Senior Scientist at Pivot Bio, MA; Ryjenkov DA (2001-06): R&D Director, Mabscale Biotech, Russia.

M.S. (completed): Muna T (2020), joint with Dr. Bushman, Res. Technician, Univ. Manitoba; Abrar R (2019), Res. Technician, Univ. Virginia; Doherty T (2018), Res. Technician at Plenty; Dhungana S (2018), joint with J. Bushman; Res. Asst., UCLA; Lazic M (2017), Ph.D. student, Univ. Alberta; Hinshaw J (2017), joint with A. Lyuksyutova; M.D. student (WWAMI); Tang X (2014), Res. Asst., China; Dabhi J (2011), Quality Control Analyst, Genzyme Sanofi; Amarendran V (2005), M.D.

Undergraduate students: >20. **High school students:** >20. **Elementary school students:** MicroAcademy Project with Laramie Montessori School (2014-16).

SERVICE

National/ International (*last 5 years*)

Grant proposal and manuscript review: NIH panels: Permanent member (2018-present): ZRG1-OTC-M 08. Immuno-oncology Research. *Ad hoc*: 2016 (ZRG1 IDM S 81); 2017 (ZRG1 IDM S 82); 2018 (ZRG1 IDM S 84); 2018 (CMT); 2019 (ZRG1 IDM-S 83); 2020 (CMT); 2020 ZEB1 OSR-D (O1) P.

NSF panels: 2016 (BIO IOS), 2021 (EPSCoR, V211656);

German Research Foundation (Deutsche Forschungsgemeinschaft, DFG): 2016 (SPP1879); 2016 (SPP1926); 2017 Centers of Excellence in Immunology and Infectious Diseases; 2019 (SPP1879/2); 2019 (SPP1926/2).

Mail reviewer: numerous international funding agencies and journals.

Meeting organization: 2nd Optogenetic Technologies and Applications. Society for Biological Engineering. Org. Committee. (2021); 1st Optogenetic Technologies and Applications. Society for Biological Engineering. Co-chair. Boston, MA (2019).

Service for professional societies: Intl. Symp. Phototrophic Prokaryotes, Scientific Committee (2012-18).

University/ Department (*last 5 years*)

Current: 2017-present: UW Sensory Biology Center, Internal Advisory Committee; 2008-present Graduate Program in Molecular Biology; 2015-present: Committee Chair; 2004-present Microbiology Program, Steering Committee.

Past: Dept. of Molecular Biology Faculty Search Committees: 2017 (Chair), 2018 (Chair), 2019. Sensory Biology Center, Faculty Search Committee (2020); Dept. of Molecular Biology Curriculum Committee (2004-09; 2019-20); UW Agricultural Experiment Station: panel member (2016); proposal reviewer (2006, 2018); Scholarship Committee, College of ANR (2000-2017).

PUBLICATIONS

Total publications: 93. Total citations: >9,200. Hirsch index, H=45 (Google Scholar).

<https://scholar.google.com/citations?user=EBV-dIEAAA&hl=en>

PATENTS AND PATENT APPLICATIONS

Total: 5.

<https://patents.google.com/?inventor=gomelsky+mark&oq=gomelsky+mark>