

Magdalena Popowska, PhD, DSc, Associate Professor

University of Warsaw, Faculty of Biology,
Institute of Microbiology,
Miecznikowa 1, 02-096, Warsaw, Poland
Phone (+48 22) 55 41 420,
Fax (+48 22) 55 41 402
E-mail magdapop@biol.uw.edu.pl

Work experience:

Occupation or position held:

November 1991 – Assistant

January 2004 – present, Head of Unit,

January 2004 – February 2013 - Postdoctoral researcher

October 2007 – May 2009 - Head of Department of General Microbiology (Institute of Microbiology UW)

February 2013 – Associate Professor, Institute of Microbiology, Faculty of Biology, University of Warsaw

October 2016 - Director of the Institute of Microbiology UW

Main activities and responsibilities:

1. Level of antibiotic and chemotherapeutic resistance of *L. monocytogenes*, *Salmonella* spp. strains isolated from food.
2. Biofilm Architecture and Biofilm Formation in Environmental Condition. Determination of the level of transfer of antibiotic resistance genes encoding on conjugative plasmids isolated from *Aeromonas* strains, in biofilms formed by *Aeromonas* and *Escherichia coli* strains and in activated sludge obtained from sewage treatment plant.
3. Characteristic of antibiotic resistance genes found in bacteria isolated from soil and the waste water treatment plants - identification, prevalence of mobile genetic elements and defined their horizontal transfer.
4. Characteristics of antibiotic resistance and antibiotic resistance genes among *Aeromonas* spp. isolated from urban wastewater treatment plant - especially occurrence and variety of β -lactamases genes.
5. The variety of plasmids carrying antibiotic resistance genes and heavy metals resistance genes in natural environment bacteria.

Scientific cooperation: COST Action

1. Member of Management Committee in COST Action TD0803: „Detecting evolutionary hot spots of antibiotic resistances in Europe” (DARE), 2009-2013.
2. Member of Management Committee in COST Action ES1403 „New and emerging challenges and opportunities in wastewater reuse (NEREUS)”, 2014-2018.

List of most relevant publications from the last five years (out of 32 total publications):

- Mąka Ł., Maćkiw E., Stasiak M., Wołkowicz T., Kowalska J., Postupolski J., Popowska M. 2018. Ciprofloxacin and nalidixic acid resistance of *Salmonella* spp. isolated from retail food in Poland. International Journal of Food Microbiology. <https://doi.org/10.1016/j.ijfoodmicro.2018.03.012>
- Piotrowska M., Przygodzińska D., Matyjewicz K., **Popowska M.** 2017. Occurrence and variety of β -lactamases genes among *Aeromonas* spp. isolated from urban wastewater treatment plant. *Frontiers in Microbiology*, 8:863.
- **Popowska M.**, Krawczyk-Balska M., Ostrowski R., and Desvaux M. 2017. InIL from *Listeria monocytogenes* is involved in biofilm formation and adhesion to mucin. *Frontiers in Microbiology* 8:660.
- Piotrowska M. and **Popowska M.** 2015. Insight into the mobilome of *Aeromonas* strains. *Frontiers in Microbiology*, 6:494.
- Mąka Ł., Maćkiw E., Ścieżyńska H., Modzelewska M., **Popowska M.** 2015. Resistance to sulphonamides and dissemination of *sul* genes among *Salmonella* spp. isolated from food in Poland. *Foodborne Pathogens and Disease*, 12(5):383-389.
- Mąka Ł., Maćkiw E., Ścieżyńska H., **Popowska M.** 2015. Antimicrobial resistance of *Salmonella* strains isolated in Poland from food other than meat. *Annals of Agricultural and Environmental Medicine*, 22(3):403-408.
- Renier S., Chagnot C., Deschamps J., Caccia N., Szlavik J., Joyce S.A., **Popowska M.**, Hill C., Knøchel S., Briandet R., Hébraud M., Desvaux M. 2014. Inactivation of the SecA2 Protein Export Pathway in *Listeria monocytogenes* Promotes Cell Aggregation, Impacts Biofilm Architecture and Induces Biofilm Formation in Environmental Condition. *Environmental Microbiology*, 16(4):1176-92.
- Cantas L., Shah S.Q.A., Cavaco L.M., Manaia C., Walsh F., **Popowska M.**, Garelick H., Bürgmann H., Sørum H. 2013. A brief multi-disciplinary review on antimicrobial resistance in medicine and its linkage to the global environmental microbiota. *Frontiers in Microbiology*, 4:96.
- **Popowska M.**, Rzczycka M., Miernik A., Krawczyk-Balska A., Walsh F., Duffy B. 2012. Influence of soil use on prevalence of tetracycline, streptomycin, and erythromycin resistance and associated resistance genes. *Antimicrobial Agents and Chemotherapy*, 56(3):1434-1443.