Post-graduate Research in Microbiology

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Education

- **2000 – 2005** Department of Biochemistry & Biotechnology, University of Thessaly, Greece
- **2006 – 2012** Department of Microbiology, Faculty of Medicine, National and Kapodistrian University of Athens, Greece

  Laboratory of Bacteriology, Hellenic Pasteur Institute, Greece
- **2010 – 2012** Department of Microbiology, National School of Public Health, Greece
- **After 2012** Department of Microbiology, Faculty of Medicine and University Hospital in Plzen, Charles University in Prague, Czech Republic

Phd: ‘Plasmid encoded drug resistance islands: study of structure, expression and movement of complex configuration of resistance genes in clinical strains of *Enterobacteriaceae*’

Sequence of pR3521, an IncB Plasmid from *Escherichia coli* Encoding ACC-4, SCO-1, and TEM-1 β-Lactamases[▽]

C. C. Papagiannitsis,[1] L. S. Tzouvelekis,[1,2] S. D. Kotsakis,[1] E. Tzelepi,[1] and V. Miriagou[1]*

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Sequence of pNL194, a 79.3-Kilobase IncN Plasmid Carrying the *bla*$_{VIM-1}$ Metallo-β-Lactamase Gene in *Klebsiella pneumoniae*[▽]

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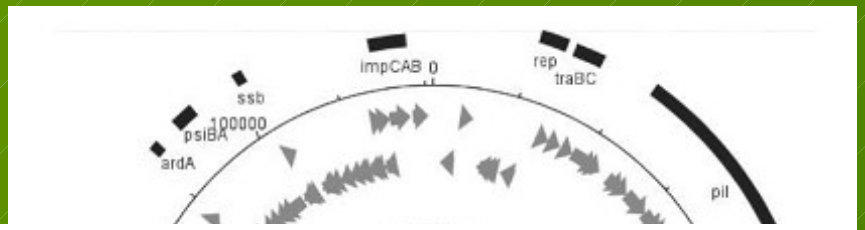

Relative Strengths of the Class 1 Integron Promoter Hybrid 2 and the Combinations of Strong and Hybrid 1 with an Active P2 Promoter[▽]

Costas C. Papagiannitsis,[1] Leonidas S. Tzouvelekis,[2] and Vivi Miriagou[1]*

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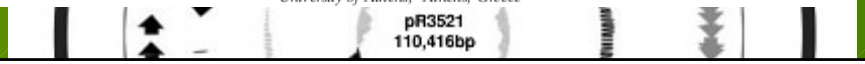

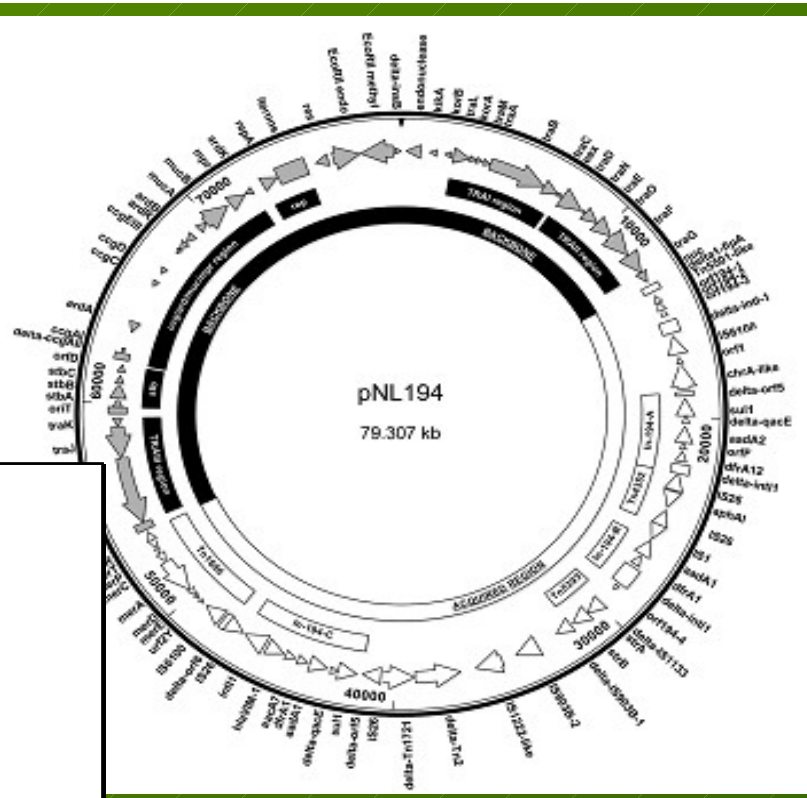

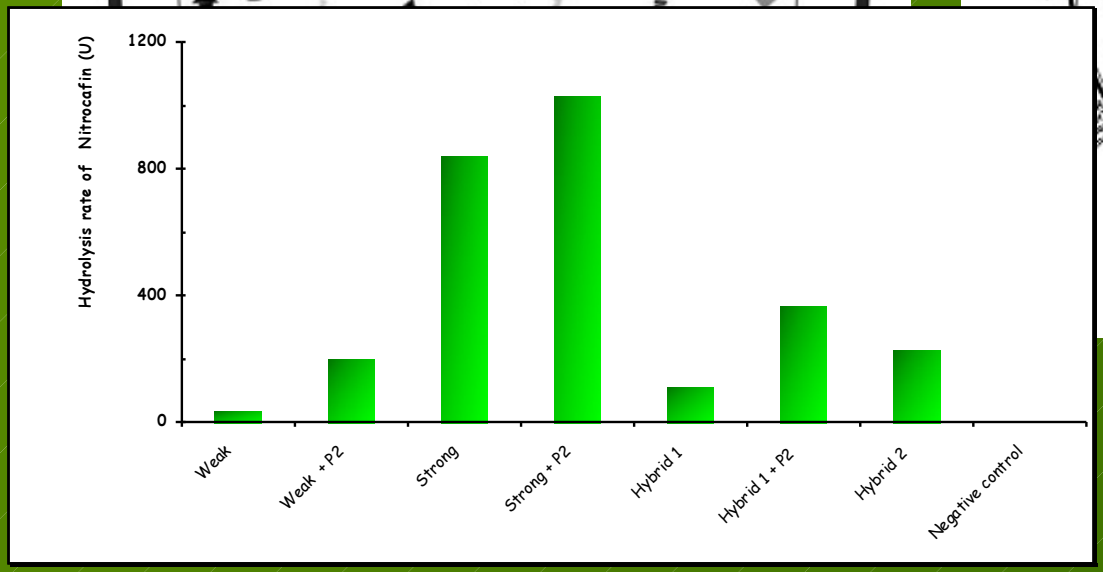

Other projects involved

- Extended-spectrum properties of CMY-30, a Val211Gly mutant of CMY-2 cephalosporinase
- GES-13, a β-lactamase variant possessing Lys-104 and Asn-170 in *Pseudomonas aeruginosa*
- An ertapenem-resistant extended-spectrum-β-lactamase-producing Klebsiella pneumoniae clone carries a novel OmpK36 porin variant
- Detecting VIM-1 production in *Proteus mirabilis* by an imipenem-dipicolinic acid double disk synergy test
- Detection of metallo-β-lactamase genes in clinical specimens by a commercial multiplex PCR system
- Emergence of *Serratia liquefacines* and *Klebsiella oxytoca* with metallo-β-lactamase-encoding IncW plasmids: further spread of the $bla_{\text{VIM-1}}$ carrying integron In-e541
- Emerging *Klebsiella pneumoniae* isolates coproducing KPC-2 and VIM-1 carbapenemases

Post-graduate Research in Greece (2010-2012)

Letters to the Editor

Emergence of *Klebsiella pneumoniae* of a novel sequence type (ST383) producing VIM-4, KPC-2 and CMY-4 β-lactamases

doi:10.1016/j.ijantimicag.2011.09.020

Diversity of acquired β-lactamases amongst *Klebsiella pneumoniae* in Greek hospitals

An update of the evolving epidemic of bla_{KPC-2}-carrying *Klebsiella pneumoniae* in Greece (2009–10)

Panagiota Giakkoupi[1], Costas C. Papagiannitsis[1], Vivi Miriagou[2], Olga Pappa[3], Michalis Polemis[3], Kyriaki Tryfinopoulou[3], Leonidas S. Tzouvelekis[4] and Alkiviadis C. Vatopoulos[1]*

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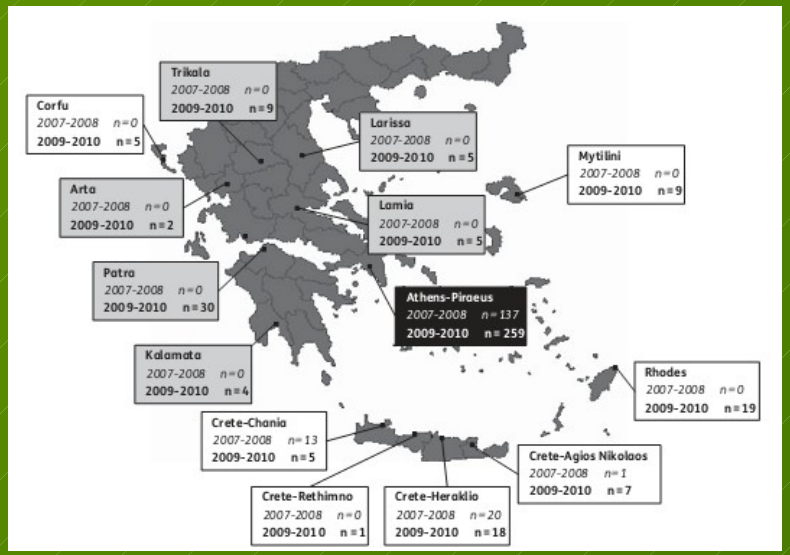
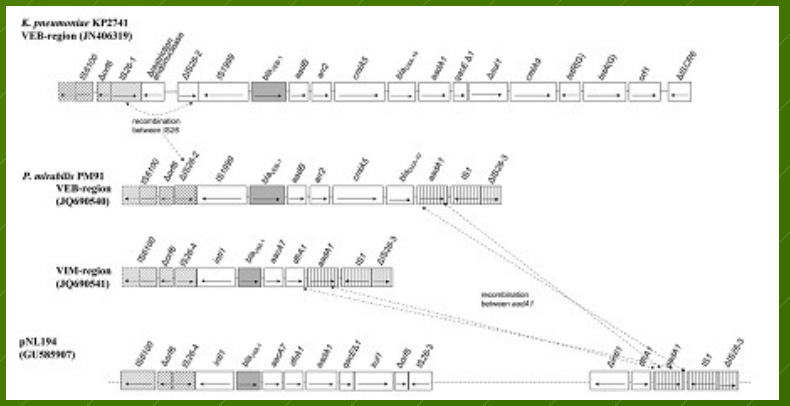
Table 1
Characteristics of 256 *Klebsiella pneumoniae* isolates.

β-Lactamase content[a]	No (%) of isolates	PFGE type(s) (no. of isolates typed)	MIC range (mg/L)[b]			
			Imipenem (R >8; S ≤2)[c]	Meropenem (R >8; S ≤2)[c]	Ertapenem (R >1; S ≤0.5)[c]	Doripenem (R >4; S ≤1)[c]
CMY-4	3 (1.2)	E(1)	0.19–0.38	0.25–0.64	0.019–0.38	0.047–0.064
CMY-4 + SHV-12	1 (0.4)	A(1)	0.25	0.125	0.38	0.064
CMY-4 + CTX-M-15	4 (1.6)	E(2)	0.19–0.25	0.38–0.64	0.38–0.64	0.064–0.094
CMY-4 + CTX-M-15 + VEB-1	1 (0.4)	E(1)	2	8	16	4
VEB-1	1 (0.4)	N/D	0.25	0.032	0.047	0.064
CTX-M-15	5 (2.0)	U(1)	0.25–0.38	0.064–0.38	0.047–0.25	0.064–0.094
SHV-12	11 (4.3)	A(2), E(1)	0.25–0.38	0.25–1.5	0.019–1	0.047–0.19
KPC-2	13 (5.1)	U(3)	8 to >32	2 to >32	2 to >32	2 to >32
KPC-2 + VEB-1	1 (0.4)	U(1)	>32	32	32	16
KPC-2 + CMY-4	2 (0.8)	E(1)	32	32	32	24
KPC-2 + CMY-4 + SHV-12	1 (0.4)	A(1)	12	32	>32	24
KPC-2 + CMY-4 + CTX-M-15	1 (0.4)	E(1)	12	8	24	12
KPC-2 + SHV-12	85 (33.2)	A(7), B(1)	4 to >32 (32/>32)	4 to >32 (>32/>32)	12 to >32 (>32/>32)	3 to >32 (32/>32)
KPC-2 + VIM-19 + CMY-4	1 (0.4)	E(1)	>32	>32	>32	>32
KPC-2 + VIM-1 + SHV-12	2 (0.8)	U(1)	>32	>32	>32	>32
KPC-2 + VIM-1	4 (1.6)	B(2)	16–32	3–32	6–24	2–16
VIM-1	12 (4.7)	B(1)	>32	>32	>32	>32
VIM-27	1 (0.4)	B(1)	32	>32	>32	>32
VIM-1 + SHV-12	3 (1.2)	B(1)	12–32	16–32	3–32	2–32
VIM-27 + SHV-5	1 (0.4)	B(1)	>32	>32	>32	>32
VIM-19 + CMY-4	2 (0.8)	E(1)	6–8	4–8	6–8	1.5–2
VIM-19 + CMY-4 + CTX-M-15	3 (1.2)	E(1)	4–32	8–12	4–12	1.5–4
3GC-susceptible isolates	98 (38.3)	N/D	0.125–0.38 (0.25/0.38)	0.012–2 (0.16/1)	0.008–0.38 (0.016/0.125)	0.023–0.094 (0.047/0.094)



Characterization of a Transmissible Plasmid Encoding VEB-1 and VIM-1 in *Proteus mirabilis*



Rapid Typing of Extended-Spectrum β-Lactamase- and Carbapenemase-Producing *Escherichia coli* and *Klebsiella pneumoniae* Isolates by Use of SpectraCell RA

Diana Willemse-Erix,[a,c] Tom Bakker-Schut,[b,c] Femke Slagboom-Bax,[c] Jan-willem Jachtenberg,[c] Nicole Lemmens-den Toom,[a] Costas C. Papagiannitsis,[d] Kuntaman Kuntaman,[e] Gerwin Puppels,[b,c] Alex van Belkum,[a]* Juliëtte A. Severin,[a] Wil Goessens,[a] and Kees Maquelin[b,c]

Characterization of Metallo-β-Lactamase VIM-27, an A57S Mutant of VIM-1 Associated with *Klebsiella pneumoniae* ST147[▽]

C. C. Papagiannitsis,[1] S. D. Kotsakis,[2] E. Petinaki,[3] A. C. Vatopoulos,[1] E. Tzelepi,[2] V. Miriagou,[2] and L. S. Tzouvelekis[2,4]*

Department of Microbiology, National School of Public Health, Athens,[1] Laboratory of Bacteriology, Hellenic Pasteur Institute, Athens,[2] Department of Microbiology, Medical School, University of Thessalia, Larissa,[3] and Department of Microbiology, Medical School, University of Athens, Athens,[4] Greece

Post-graduate Research in the Czech Republic (2012 - . . . .)

Analysis of Mobile Genetic Elements carrying Metallo-beta-lactamase genes, in the Czech Republic

- Characterization of MβL-producing *Pseudomonas aeruginosa* isolated in University Hospital in Brno, during 2011
- Characterization of NDM-4-producing *Enterobacter cloacae* strain from a Czech patient previously hospitalized in Sri Lanka
- Characterization a VIM-1-producing *Leclercia adecarboxylata* strain from a non-clinical sample

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Děkuji