

**Keith Anthony Grimaldi MD PhD** - Direttore Scientifico di Sorgente Genetica

### Posizioni ricoperte

**Dal 2011 ad oggi:**

- **Direttore Scientifico** *Sorgente Genetica*
- **Editorial Board** *Frontiers in Genetics*

**Dal 2008 ad oggi:**

- **Direttore Scientifico** *Eurogene eTEN project* (<http://eurogene.biomed.ntua.gr/>)
- **Consulente scientifico** *Biomedical Engineering Laboratory dell'Università di Atene*

**2004–2008: Director of Research**, *Sciona Inc, Boulder, Colorado*

Responsible for the development of new genetic testing products, from concept to final product. These include pharmacogenetic, nutritional, cardiovascular and oncological genetic screening panels.

**2002 – 2004: Senior Scientist** *Sciona Ltd*

**1997 – 2002: Technical Director** *IPIX Europe, Middle East & Africa*

**1992 – 1997: Senior Research Fellow** *Department of Oncology, University College London, School of Medicine*

Drug/DNA reactions: method development, study of DNA damage and repair in genes and single nucleotides. Developed novel techniques to study damage and repair in mammalian cells at the sub-gene and nucleotide levels.

**Feb 1990 – 1992: Postdoctoral Research Fellow** *Medical Molecular Biology Unit, Department of Biochemistry and Mol Biol., University College London*

Study of developmental regulation of RNA splicing proteins

**1986 – 1989: Research and Technical Development Manager** *Galibia (Serono) Spa, Italy*

Development of analytical methods and procedures for quality control and production yield monitoring. Process research to improve production methods and to stop “disasters” happening. Basic research on reproductive protein hormone isoforms – see details after Publications.

**1986: Postdoctoral Research Assistant** *Department of Immunology, Middlesex Hospital Medical School, University of London.*

Short peptide antigens and arthritis auto-immunity

## Grants

1. **Micro2DNA** FP6-027333-STP, Integrated polymer-based micro fluidic micro system for DNA extraction
2. **EuroGENE (Scientific Director)** eTen Market Validation: 046310, An integrated high secure cross-border platform for the delivery of optimal personalized lifestyle recommendations based on genetic analysis, <http://eurogene.biomed.ntua.gr/>
3. **EurHealthAging**

## Papers

1. Grimaldi, K.A., Hutton, J.C., and Siddle, K. (1987). Production and characterization of monoclonal antibodies to the insulin secretory granule membrane. *Biochemical Journal*, **245**:557 – 566.
2. Grimaldi, K.A., Siddle, K., and Hutton, J.C. (1987). Biosynthesis of insulin secretory granule membrane proteins – control by glucose. *Biochemical Journal*, **245**:567 – 573.
3. Hutton, J.C., Davidson, H.W., Grimaldi, K.A., and Peshavaria, M. (1987). Biosynthesis of Betagranin in Pancreatic B-cells. *Biochemical Journal* **244**:449 – 456.
4. Hutton JC, Peshavaria M, Davidson HW, Grimaldi K, Von Strandmann RP, Siddle K (1986). The insulin secretory granule: features and functions in common with other endocrine granules. *Adv Exp Med Biol* **211**:385-96
5. Grimaldi, K.A., Gerrelli, D., Sharpe, N., Lund, T., and Latchman, D. (1991). The Intronless mouse gene for the tissue specific splicing protein SmN is a processed pseudogene containing a stop codon after thirty one amino acids. *DNA Sequence* **2**:241 – 246.
6. Grimaldi, K. Horn, D., Hudson, L., Terenghi, G., Barton, P., Polak, J. and Latchman, D. (1993) Expression of the SmN Splicing Protein is Developmentally Regulated in the Rodent Brain but Not in the Rodent Heart. *Developmental Biology* **156**:319 – 323.
7. Gerrelli, D., Grimaldi, K., Horn, D., Mahadeva, U., Sharpe, N. and Latchman, D. (1993) The Cardiac Form of the Tissue-Specific SmN Protein is Identical to the Brain and Embryonic Forms of the Protein. *J. Mol. Cell Cardiol*, **25**:321 - 329
8. Grimaldi, K.A., McAdam, S.R., Souhami, R.L., and Hartely, J.A. (1994) DNA Damage by Anti-Cancer Agents Resolved at the Nucleotide Level of a Single Copy Gene: Evidence for Novel Binding Site for Cisplatin in Cells. *Nucleic Acids Res.* **22**:2311 - 2317

9. Grimaldi, K.A., Bingham, J.P., Souhami, R.L., and Hartley, J.A. (1994) DNA Damage by Anticancer Agents and its Repair. Mapping in Cells at the Sub-Gene Level with Quantitative Polymerase Chain Reaction. *Analytical Biochemistry* **222**:236 – 242
10. Grimaldi KA, McGurk CJ, McHugh PJ, Hartley JA (2002) PCR-based methods for detecting DNA damage and its repair at the sub-gene and single nucleotide levels in cells. *Mol Biotechnol.* 2002 Feb; **20(2)**:181-96.
11. Bingham, J.P., Hartley, J.A., Souhami, R.L. and Grimaldi, K.A. (1996) Strand-Specific Measurement of Cisplatin-Induced DNA Damage and Repair Using Quantitative PCR. (1996) *Nucleic Acids Res.* **24**:987 - 989
12. Sunters, A., Grimaldi, K.A., Souhami, R.L., and Hartley, J.A. (1996) The Use of alpha-DNA as an Internal Standard in the Detection and Quantitation of DNA Damage in Specific Genes Using Southern Blotting. *Nucleic Acids Res.* **24**:2456 - 2457
13. Smellie, M., Grimaldi, K.A., Bingham, J.P., McAdam, S.R., Thompson, A.S., Thurston, D.E. and Hartley, J.A. (1996), "Crosslinking and sequence specific binding in isolated DNA and intact cells by C8-linked pyrrolobenzodiazepine dimmers DSB-120 and At-486".
14. Beccaglia, P., Brogini, M., D'Incalchi, M., Hartley, J.A., and Grimaldi, K.A., (1996) "DNA adduct formation of the sequence selective cytotoxic agent tallimustine resolved at the nucleotide level in a single copy gene in mammalian cells
15. Koberle, B., Grimaldi, K.A., Sunters, A., Hartley, J.A., Kelland, L., and Masters J.W. (1997) DNA repair capacity and cisplatin sensitivity of human testis tumour cells. *Int J Cancer.* 1997 Mar 4; **70(5)**:551-5.
16. Koberle, B., Payne, J., Grimaldi, K., Hartley, J. and Masters, J. (1996) "DNA Repair in Cisplatin-Sensitive and Resistant Human Cell Lines Measured in Specific Genes by QPCR. *Biochem Pharmacol.* 1996 Dec 13; **52(11)**: 1729-34.
17. Sunters, A., Grimaldi, K.A., Souhami, R.L., and Hartley, J.A. (1998) Gene and human tumour cell line specific differences in nitrogen mustard induced DNA alkylation and interstrand crosslinking frequencies. *Nucleic Acids Res.* **26**:5617-23
18. Holford, J., Raynaud, F., Murrer, B.A., Grimaldi, K.A., Hartley, J.A., Abrams, M., Kelland, L.R. (1998) Chemical, biochemical and pharmacological activity of the novel sterically hindered platinum co-ordination complex, cis-[amminedichloro(2-methylpyridine)] platinum(II) (AMD473). *Anticancer Drug Des.* 1998 Jan; **13(1)**: 1-18.
19. McGurk CJ, McHugh PJ, Tilby MJ, Grimaldi KA, Hartley JA (2001) Measurement of covalent drug-DNA interactions at the nucleotide level in cells at pharmacologically relevant doses. *Methods Enzymol.* 2001; **340**:358-76

20. Grimaldi KA, McGurk CJ, McHugh PJ, Hartley JA. (2002) PCR-based methods for detecting DNA damage and its repair at the sub-gene and single nucleotide levels in cells. *Mol Biotechnol.* 20(2):181-96.
21. Grimaldi KA, Gill-Garrison R, Roberts, GW (2003) Personalized nutrition: An early win from the human genome project. *Integrative Medicine* 2(4): 34-45
22. Arkadianos I, Valdes AM, Marinos E, Florou A, Gill RD, Grimaldi KA. (2007) Improved weight management using genetic information to personalize a calorie controlled diet. *Nutrition J.* 2007 Oct 18;6(1):29 – **Highly Accessed:** <http://www.nutritionj.com/content/6/1/29>
23. Olano-Martin E, Abraham EC, Gill-Garrison R, Valdes AM, Grimaldi K, Tang F, Jackson KG, Williams CM, Minihane AM (2008) Influence of apoA-V gene variants on postprandial triglyceride metabolism: impact of gender. *J Lipid Res.* 2008 May;49(5):945-53. Epub 2008 Feb 8. Click here to read
24. Grimble et al., Genetic variants in the TNF $\alpha$ , IL10 and GSTP1 genes influence inflammatory response to alpha-tocopherol supplementation among healthy males (in preparation)

### Book Chapters

1. Grimaldi, K.A., McAdam, S.R. and Hartley, J.A. (1999), PCR-based assays for strand-specific measurement of DNA damage and repair. II. Single-strand ligation-PCR. *Methods Mol Biol.* 1999; 113: 241-55.
2. Grimaldi, K.A., Bingham, J.P. and Hartley, J.A. (1999), PCR-based assays for strand-specific measurement of DNA damage and repair. I. Strand-specific quantitative PCR. *Methods Mol Biol.* 1999; 113: 227-40.
3. Grimaldi, K.A. and Hartley, J.A., "PCR-Based Methods for Detecting DNA Damage and its Repair at the Sub-Gene and Single Nucleotide Levels in Cells" in *Methods in Molecular Medicine – Drug DNA Interactions* K. Fox, Eds. (Humana Press, 1996).
4. Grimaldi, K.A., McAdam, S.R. and Hartley, J.A. (1996), "Detection of DNA Adducts by Single Strand Ligation PCR" in *Technologies for Detection of DNA Damage and Mutations* G. Pfeifer, eds. (Plenum Press, New York, 1996).
5. Grimaldi, K.A. and Hartley, J.A. (1997), "PCR-Based Methods for Detecting DNA Damage and its Repair at the Sub-Gene and Single Nucleotide Levels in Cells" *Methods Mol Biol.* 1997; 90: 157-80.
6. Hartely, J.A., Souhami, R.L. and Grimaldi, K.A., "Detection of Platinum Lesions at the Nucleotide Level in Cells Using Single Strand Ligation PCR", in *Platinum and Other Metal Coordination*

*Compounds in Cancer Chemotherapy 2* H. M. Pinedo, J.H. Schomagel, Eds. (Plenum Press, New York, 1996) pp. 121 – 130.

7. Hutton, J.C., Davidson H., Grimaldi, K.A., and Siddle, K. (1986). Proteins of the Insulin Secretory Granule. in *Diabetes 1985* (M Serrano Rios and P.J. Lefebvre, eds). Elsevier Science Publishers BV.
8. Hutton, J.C. Peshavaria, M., Davidson, H.W., Grimaldi, K.A., Pogge von Strandmann, R., and Siddle, K. (1987). The insulin secretory granule. Features and functions in common with other endocrine granules. in *Biophysics of the Pancreatic B-Cell*. Plenum Press.
9. Hutton, J.C., Guest, P.C., Rhodes, C.J., Fricker, L.D., Grimaldi, K.A. Siddle, K., Davidson, H.W., and Bailyes, E.M. (1989). The biogenesis of the insulin secretory granule. in *Journees de Diabetologie*. Flammaron Press.
10. Hutton, J.C., Grimaldi, K.A., Davidson, H.W., and Guest, P.C. (1989). Granule related events and insulin release: Granule biogenesis. in *Diabetes*, Excerpta Medica Conf. Series.