



AURELION THERAPEUTICS

Peptide Discovery and Design

Introducing the **Aurelion Tx** Platform





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Peptide Discovery and Design

Company Background

Aurelion Therapeutics, Inc. is a Nevada corporation formed by its parent company Tithon Biotech, Inc., a Delaware corporation engaged through its various subsidiaries in the research, development and commercialization of biomedical solutions addressing various degenerative medical conditions in both humans and animals (“Tithon”).

Tithon’s technologies and products result from years of both private and university research and development by pioneers in the field of biotechnology, in collaboration with medical practitioners within various fields of medicine throughout the world. See: www.tithonbiotech.com.

In the process of advancing one of Tithon’s technologies concerning the effects of light frequencies on biological materials, Tithon’s chief scientist, Dr. Vasilis Paspaliaris, began reviewing work performed by Dr. Irena and Drasko Cosic and their results in the application of their Resonant Recognition Model or RRM, which has led to a mutual collaboration between Tithon and the Cosics, intended to advance their work in the application of the RRM model in identifying unique ligands for use in advancing therapeutic discovery and development.



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Drug Discovery Background

The pharmaceutical industry has a continuing requirement for new therapeutics, in turn relying on a steady pipeline of new drug leads.

Peptides are recognized for being highly selective and efficacious and, at the same time, relatively safe and well tolerated. Consequently, there is an increased interest in peptides in pharmaceutical research and development (R&D), and approximately 140 peptide therapeutics are currently being evaluated in clinical trials.

Given that the low-hanging fruits in the form of obvious peptide targets, based on traditional methods of peptide-drug discovery, have already been picked, it has now become necessary to explore new routes beyond traditional peptide design.



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Background

The Aurelion Tx Platform employs a non-traditional approach capable of satisfying this need.

Receptor Analysis

Employing quantum physics, based on our proprietary Aurelion Tx Technology Platform we now possess an entirely new way of discovering peptide leads for all cell surface protein receptors

New Peptides

Additionally, employing our Aurelion Tx Technology Platform, which is based on the RRM Model, we are now capable of building a massive library of custom synthesized Peptides for use in therapeutic applications



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Aurelion Tx Technology Platform

The Aurelion Tx Technology Platform relies upon the Resonant Recognition Model or RRM to identify quantum physics signatures.

RRM is based on the discovery and verification that every protein receptor in the body has a specific resonating frequency in the light spectrum.

Through use of our proprietary Aurelion Tx Technology Platform, employing the RRM, we can accurately calculate these functional resonating frequencies.

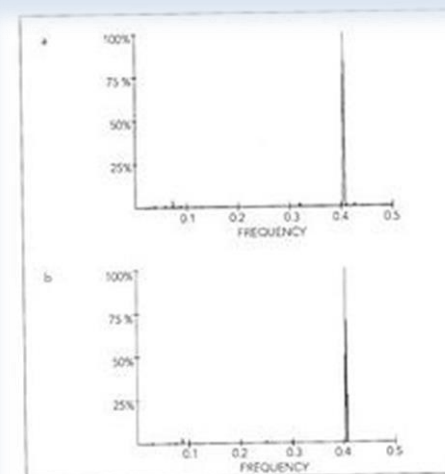


Figure 6.3 Comparison between NGFs and their receptors
(a) Consensus RRM spectrum of eight NGFs. Common characteristic frequency is at $f_1 = 0.404 \pm 0.008$. (b) Cross-spectrum of eight NGFs and seven NGF receptors. Common frequency is again at $f_1 = 0.404 \pm 0.008$, denoting the characteristic for their mutual interaction.

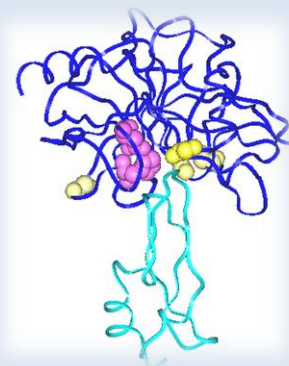
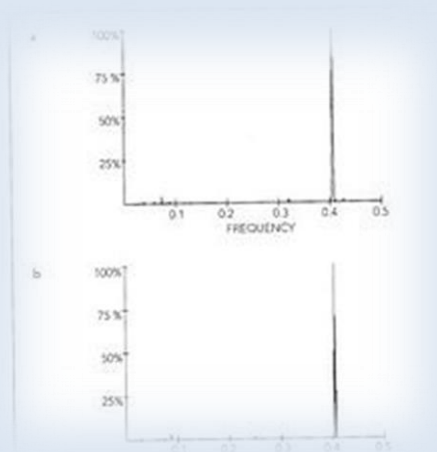


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Aurelion Tx Technology Platform

This light frequency information can then be used to identify or develop peptides that have the same resonating frequency and are therefore likely to bind to the receptor and either activate or block it.



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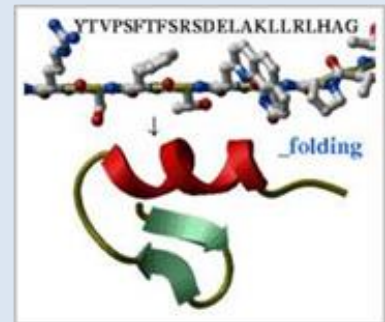
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Aurelion Tx Platform

Aurelion Tx utilizes protein amino acid sequences, 2 and 3 dimensional protein structure and crystallographic data of cell surface protein receptors from publicly available databases. Following pre-analyses quantum physics calculations and signatures based on the RRM, 18-mer peptide sequences are then calculated which have a high prediction of binding to receptors with agonist and antagonist intention.

Pos	N	Residues	C	MW(Da)	Score
126	LTG	PTGKQVYV	WHD	521.37	23.766
131	WVQ	ENCTVWV	NLV	412.49	23.611
131	ENP	PTVWGLVY	WVQ	566.65	8.842
48	LTG	QVTVWV	AAI	482.69	7.724
104	YSA	SETVWVTE	WAG	544.93	7.74
149	WV	WVWVWV	WVQ	452.66	6.65
97	NAT	QVWVWVYV	GVY	3833.18	3.42
148	AVV	QVWVWVYV	WHD	440.92	3.391
71	WV	QVTVWV	WVQ	442.69	3.192
141	WVQ	WVTVWV	WVW	566.66	3.049
96	TVK	TVWVWVWV	WVQ	471.62	3.042
62	WVQ	QVWVWVWV	GVY	499.13	2.8429
143	WVW	QVWVWVYV	WHD	496.1	2.7491
125	WVQ	QVWVWVYV	WHD	444.69	2.6321
138	LTG	PTVWGLVY	WHD	566	2.6241
123	WV	QVWVWVYV	WVW	499.69	2.611
63	WVQ	TVWVWVWV	WVQ	503.17	2.601
17	WVW	QVWVWVYV	WVQ	492.69	2.519
149	WVW	PTVWGLVY	WVQ	443.17	2.466
147	WVQ	QVWVWVYV	WVQ	516.18	2.2323
125	WVQ	QVWVWVYV	WVQ	387.17	2.1432
146	WVQ	QVWVWVYV	WVQ	3167.42	4.34
132	WVQ	QVWVWVYV	WVW	462.69	3.246
23	WVQ	QVWVWVYV	WVQ	1152.53	4.042
62	WVQ	QVWVWVYV	WVQ	2108.11	2.89
175	WVQ	QVWVWVYV	WVQ	2307.24	2.812
98	WVQ	QVWVWVYV	WVQ	1204.3	3.862
14	WVQ	QVWVWVYV	WVQ	1003.17	3.862
117	WVQ	QVWVWVYV	WVQ	1185.17	3.28
136	WVQ	QVWVWVYV	WVQ	1151.17	3.247
144	WVQ	QVWVWVYV	WVQ	1191.17	3.067
146	WVQ	QVWVWVYV	WVQ	1191.17	2.848
133	WVQ	QVWVWVYV	WVQ	1291.17	3.076





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Aurelion Tx Platform

The remarkable finding is that by using this uniquely novel process, we are able to discover peptide drug targets to any cell surface membrane receptors with more than five times the probability and speed than compared to state-of-the-art methods currently used and at a fraction of the cost.



Lipophilicity: UPLC Retention Time

Aqueous Solubility: UV

Permeability: PAMPA

Cell Viability: MTS Assay



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Our Research Undertaking

Aurelion's ambitious plan is to discover peptide ligands and drug candidates that can stimulate or inhibit all known cell surface (transmembrane) receptors in the next 3 years.

This amounts to over 1000 peptide ligands and drug candidates.

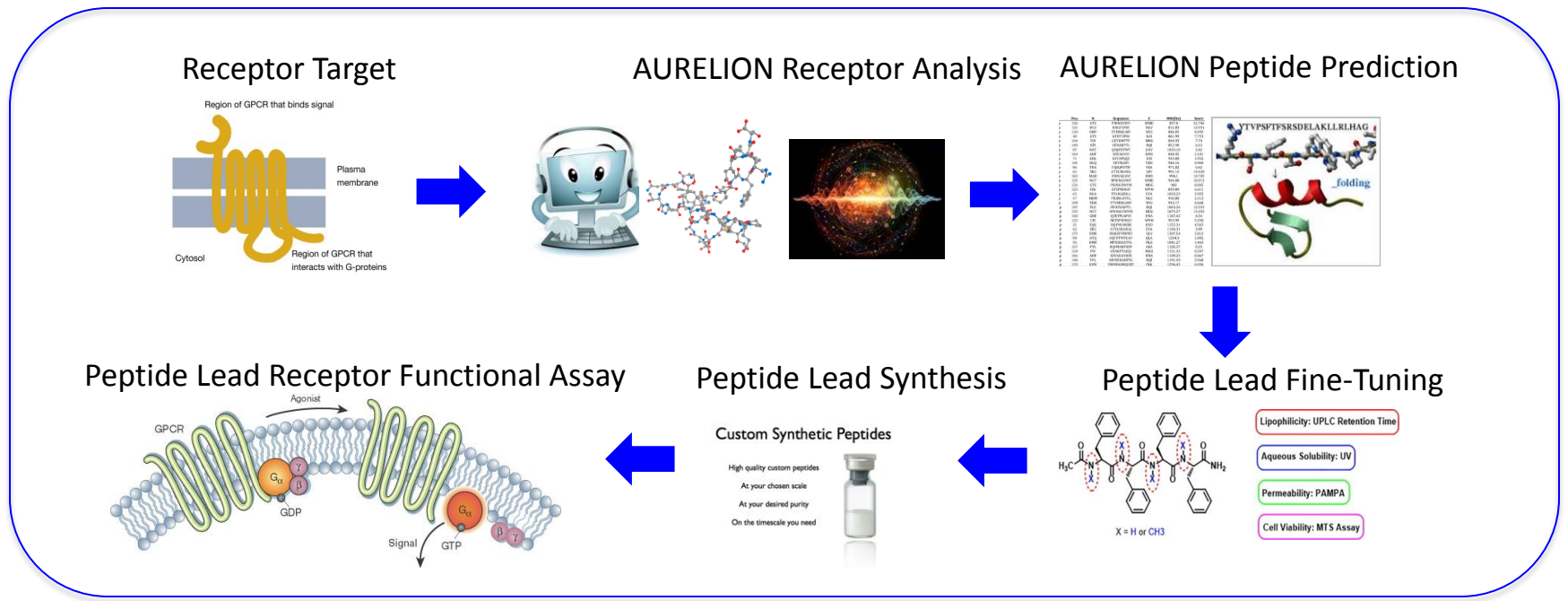




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The Aurelion Process





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The Aurelion Tx Platform in Action

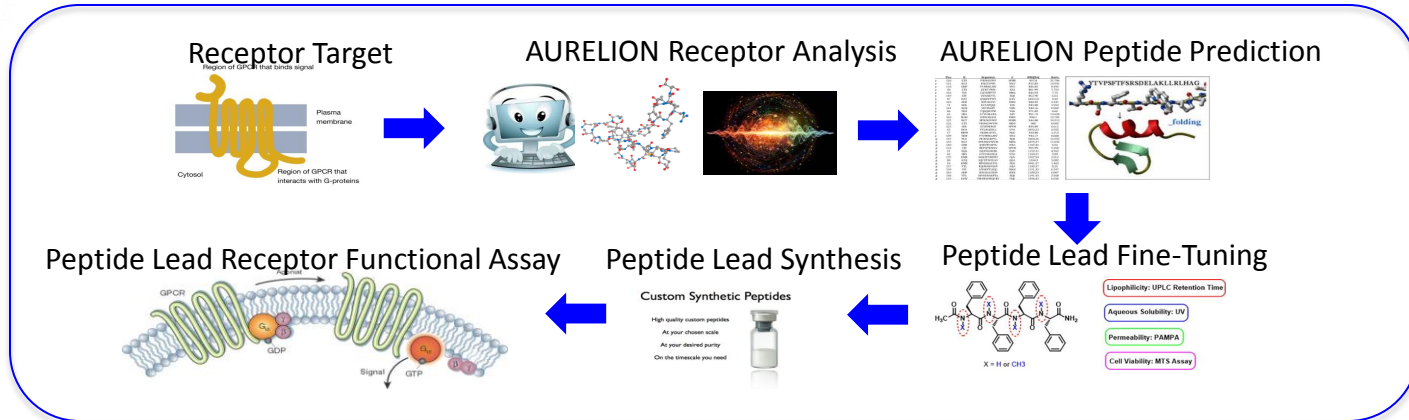
Receptor Type	Native Ligand	Lead Peptide	Effect	Stage of Discovery	Potential Disease
GPCR Target					
PTH1R	Parathyroid Hormone	ATG18PTH1	Agonist	Functional	Osteoporosis, Hypoparathyroidism
		ATG18PTH3	Antagonist	Functional	Hypercalcaemia of Malignancy
ELR Target					
NGFR (TrkR)	Nerve Growth Factor	ATT18NG1	Agonist	Functional	Ocular Disease (Glaucoma, autoimmune corneal ulcers) Multiple Sclerosis, Alzheimer's disease, and Parkinson's disease Diabetic neuropathy
		ATT18NG3	Antagonist	Fine Tuning	Ovarian Cancer and PCOS
IL12R (T1CytR)	Interleukin-12	ATTC18IL121	Agonist	Functional	Immunotherapy (cancer and allergic asthma)
		ATTC18IL123	Antagonist	Fine Tuning	Fibrosis
IGF-1R (TrkR)	Insulin-like Growth Factor	ATT18IGF1	Agonist	Fine Tuning	Stunted Growth, muscle wasting, anti-aging
		ATT18IGF3	Antagonist	Fine Tuning	Anticancer
TNF-a (TNFRSF)	Tumor Necrosis Factor	ATT18TN1	Agonist	Functional	Anticancer
		ATT18TN3	Antagonist	Fine Tuning	Autoimmune disease (all)
ICLR Target					
SYT1	Botulinum Toxin	ATI18SYT1	Agonist	Fine Tuning	Cosmetic

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The Aurelion Tx Platform Commercialization



Patent Application

Peptide Lead Licensing



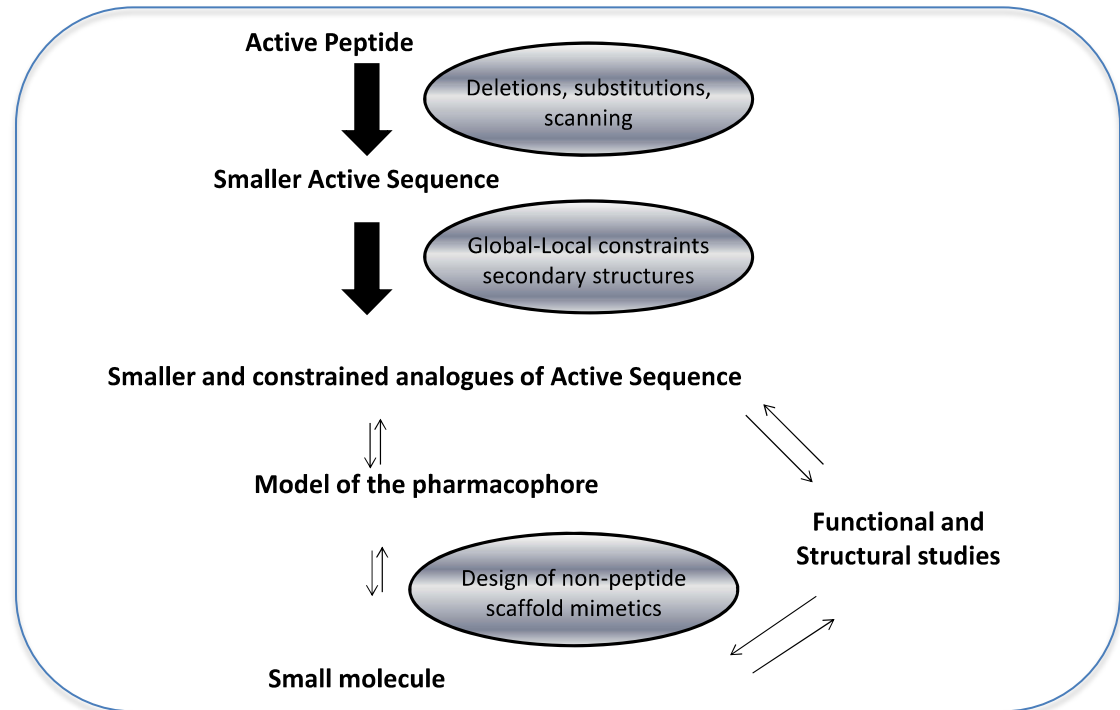
Contract Analysis and Prediction of Lead Peptide Identifying Protein Receptor Choice for Contractor

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**Further processing –
From Lead Peptide to
Small Molecule**





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The Aurelion Tx Team

Dr. Vasilis “Bill” Paspaliaris
Chairman & CEO



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Mr. Peter Milonas
Operations Director



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Dr. George Kolios
Director Science & Research



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Mr. David Strawn
Director Legal & Compliance



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Aurelion Tx Scientific & Medical Advisory Board

Dr. Irena Cosic



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Mr. Drasko Cosic



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Dr. Fred



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Mr. Marini Milonas



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The Aurelion Therapeutics

Contact Information

For Further Information regarding Aurelion Therapeutics and the Aurelion Tx Platform please contact Dr. Vasilis “Bill” Paspaliaris

at:

bpaspa@tithonbiotech.com



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Dr. Vasilis Paspaliaris – Chairman and CEO

Dr. Paspaliaris has worked at and consulted for a number of pharmaceutical and biotech companies globally. Due to his innovation he has been the founder and director of seven biotech companies since 2000. In early 2006, he founded Adistem, Ltd in Hong Kong. After finishing his doctorate in pharmacology/endocrinology in 1993 at St Vincent's Institute of Medical Research at the University of Melbourne, he completed his post-doctoral fellowship at Pfizer Central Research in Connecticut. During this time he was given two scholarships from the Australian Federal Government, and the National Health and Medical research Council of Australia and two young investigators awards in osteoporosis research from the Australian and New Zealand Bone and Mineral Society, and the International Society for Bone and Mineral Research. After doing his clinical training in Greece, he worked in combat trauma medicine in Africa where he remained and performed humanitarian work.

In 2008, Dr. Paspaliaris received an Appreciation Award from the American Association of Clinical Endocrinologists for his groundbreaking work on adipose-derived stem cells in Type II diabetes and two certificates of appreciation from the American Academy of Anti-Aging Medicine on his stem cell research and an investigators award from the Hellenic Thoracic Society. Dr. Paspaliaris has published over 20 papers, holds over 5 patents and given lectures in a variety of medical fields, mostly in stem cell medicine. He is currently a Faculty Member for the Masters degree program in Clinical Pharmacology and Therapeutics at Democritus University Medical School and the University of Crete in Greece. He is a member of the World Society of Interdisciplinary Anti-aging Medicine, the Australian Military Medicine Association and Latin American Stem Cell Society, a Fellow of the Philippine Society of Stem Cell Medicine, a Diplomat of the American Board of Regenerative Medicine, a Fellow of the American Academy of Regenerative Medicine and a Fellow of the Royal Society of Medicine (UK).



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Mr. Peter Milonas – Chief Operations Officer

Mr. Milonas was educated in Melbourne, Australia, initially at La Trobe University, where he completed a Bachelor Degree (Social Sciences) after undertaking studies across a diverse range of disciplines, including Science, Law and Arts, and later at Monash University, where he completed Pharmaceutical Industry specific Post Graduate (APMA CEP) qualifications. His career followed his passion, Health Care, and for the last 20 years he has worked in the Pharmaceutical Industry, developing extensive knowledge and experience in Sales, Marketing and Management across a number of therapeutic areas and medical sectors such as: Biotechnology, Cosmetic Medicine, Ophthalmology, Women's Health, Surgical & Capital Equipment, Gastroenterology, CNS, Hospital, Aged Care and Pharmacy. From his early beginnings as a Sales Representative, on the front line, to Business Development, and National Sales & Marketing Management, all the way through to Chief Operating Officer and Director, Peter has a complete understanding, and perspective, of the intricate world of the Health Care and Pharmaceutical business. His expertise in this area has been acquired over 2 decades of working for some major Health Care/Pharmaceutical organizations in the industry including: WYETH AYERST and LEDERLE LABORATORIES, international pharmaceutical company, specializing in areas such as, Women's health, Gastroenterology, Vaccine and CNS markets; ALCON LABORATORIES & SURGICAL, an international company specializing in the discovery, development, manufacture and marketing of surgical devices, vision care products and ophthalmic pharmaceuticals; and AUSTRALASIAN MEDICAL & SCIENTIFIC established with the aim of providing the Australian scientific and medical markets with a range of leading edge products from around the world. In the last two years Peter has been instrumental in the development of the business around the incorporated technologies into Adilyfe as he was working as the Business Development Manager of Adistem, General Manager of Paspas Pharmaceuticals, Director and Vice president of Black Arrow Biotech and Chief Operating Officer of Nereen Healthcare.



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Dr. George Kolios –Chief Medical & Scientific Officer

Dr. Kolios is Professor of Pharmacology in the Medical School at Democritus University of Thrace. He obtained his first degree in Medicine in 1980 and his PhD degree in 1992 from the Medical School at University of Athens. In 1998, he obtained his PhD degree in Pharmacology from the University of Bath, United Kingdom. In 1990, he finished his Specialization in Gastroenterology and he first worked as Registrar in Gastroenterology at Royal United Hospital, Bath, United Kingdom and then as Senior Registrar in Gastroenterology at Hippokration General Hospital, Athens, Greece. From 1998 till 2001, he worked as Consultant Gastroenterologist at Royal United Hospital, Bath, and as Senior Research Fellow in the Department of Pharmacology at University of Bath, United Kingdom. In 2001, he was appointed Assistant Professor of Gastroenterology in the School of Medicine at University of Crete and Visiting Professor in Pharmacology at University of Bath, United Kingdom. From 2008, he is Professor of Pharmacology and Head of the Laboratory of Pharmacology in the Medical School at Democritus University of Thrace and Head of the Laboratory of Clinical Pharmacology at University Hospital of Alexandroupolis, Greece. Professor George Kolios is Director of the Master's Degree Program "Clinical Pharmacology and Therapeutics" that is organized by the Medical School of Democritus University of Thrace in collaboration with the Medical School of University of Crete. From 2008 till 2013, he was Member of the Scientific Board of Approvals of the Greek National Organization for Medicines. Professor George Kolios is an experienced Clinical Gastroenterologist, and he is also very productive research scientist, with an extensive work in the area of immunopharmacology, mucosal immunology and fibrosis, mainly focused on the intestinal inflammation and inflammatory bowel diseases. His work has demonstrated that the colonic epithelium could be a rich source of various inflammatory mediators, including chemokines and nitric oxide, which are involved in intestinal inflammation and fibrosis, and that these pro-inflammatory systems can be modified by cytokines derived by T-cell population. He has more than 70 publications in peer reviewed journals, which have been cited more than 1600 times.



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David Strawn - Director Legal and Compliance

Mr. Strawn, over the past 38 years, has engaged in the practice of securities law, as an attorney, and has participated, as a private investor, in various business ventures. As a practicing attorney, Mr. Strawn has represented: registered broker dealers, venture capital investors, public reporting companies, issuers in private and IPO transactions, private and public companies in acquisition transactions, domestic broker-dealers and foreign broker-dealers engaged in cross border business and has participated in the development of an online Internet based trading system providing both order execution in trading securities and an online investment banking platform. Mr. Strawn has worked extensively in offshore financial markets and participated in the development of cross border PATRIOT Act compliance programs.

As a private investor, Mr. Strawn has participated in the strategic planning, development and funding of start-up companies, and acquisition and collaboration transactions involving early stage growth and mid-cap companies engaged in various industries, including: mining and natural resources, healthcare, biosciences, financial services, telecommunication, construction and transportation. Mr. Strawn graduated from Portland State University, summa cum laude, with a degree in finance in 1977 and from the University of Arizona-Arizona School of Law, with honors, with a Juris Doctorate degree in 1980. Mr. Strawn resides in San Diego, California.



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Professor Irena Cosic –Scientific & Medical Advisory Board

Professor Irena Cosic has been researching in the area of biomedical engineering and biomolecular electronics for more than 30 years. Her studies in these diverse areas of research resulted in publication of a research book, book chapters and more than 150 journal articles as well as referred conference papers. She was guest editor, member of editorial boards and conference chair for a number of international journals and conferences.

Professor Cosic's research has resulted in the breakthrough development of the Resonant Recognition Model, which is an innovative approach to the analysis of protein-protein and protein-DNA interactions and interaction of electromagnetic field with proteins and DNA. The Resonant Recognition Model approach can be used for various applications such as prediction of proteins active/binding sites, functional mutations, design of bioactive peptides and determination of proteins' activation frequencies.



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Mr. Drasko Cosic - Scientific & Medical Advisory Board

Mr. Drasko Cosic is Director and CEO of AMALNA Consulting, engaged in consulting regarding the Resonant Recognition Model which has been developed by Professor Irena Cosic. As director and CEO, Drasko is responsible for all software and business matters of the company.

Mr. Cosic graduated electrical and computer engineering. For over 35 years he has been involved in IT software development working with companies like UNISYS, JAT, Energoproject and ComOps. He has also been involved in the development of Resonant Recognition Model software since the beginning of its development in mid 1980s and is the author of different versions of the Resonant Recognition Model software.



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Professor Fred Fändrich, MD, PhD - Scientific & Medical Advisory Board

Professor Fändrich is the Director of the Dept. of Applied Cellular Medicine, at the University Hospital of Schleswig-Holstein, Kiel, Germany and the founder of Blasticon, the owner of a patented technology which monocytes (mature white blood cells) from blood extracted from the veins can be turned into cells with programmable properties such as those in stem cell and in turn be used for diverse applications in diagnostics and treatments.

He is the President of the European Society for Autoimmune Disease (EGAI) and is also one of five opinion leaders, World Transplant Society, Oxford, UK. Up to 2009, Professor Fändrich was a Professor of Surgery specialising in transplantation medicines. He later decided to direct his focus into the field of cellular medicine at the University of Kiel.

Professor Fändrich has been the recipient of many awards including Outstanding Physics Award, University of CA, Riverside, the Rudolf-Pichlmayr-Award for outstanding research in the field of peptide and stem-cell mediated tolerance induction, German Society of Surgery (DGC) and the GEORG-HEBERER-Award, Chiles Foundation Portland, Oregon.

He has published many scientific papers and clinical reviews under references for Transplantation, Oncology, Regenerative and Cellular Medicine, Immunotherapy and made contributions to clinical reference books.

Professor Fändrich travels frequently to Asia to conduct lectures and speak at medical and wellness conferences.



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Mr. Marini Milonas – Scientific & Medical Advisory Board

Marini Milonas is currently the Chief Sales and Marketing Officer for Nereen Healthcare a UAE based healthcare company. He is also the co-founder and board member of Cloud8 Health Pte Ltd. Mr. Marini has over 15 years' experience in the Healthcare and Pharmaceutical Industry ranging from Sales, Analytics, Sales Management, Marketing and Group Product Lead. As a passionate leader, he has demonstrated senior management competencies and has successfully lead cross-functional business units in a highly regulated industry. He has extensive experience in the areas of product development, licensing agreements, joint venture relationships, business development and government negotiations, with a strong networking capacity in the health industry across South East Asia and the Middle East. Mr. Milonas has had vast experience in pharmaceuticals sales and started as territory manager in Australia with Bristol-Myers Squibb (BMS). By the time Marini left BMS he was the Associate Director for Cardiovascular and CNS Products, Brand Lead. Mr. Milonas graduated at Victoria University with a Bachelor in Applied Science in 1995 and is a member of the Australian Pharmaceuticals Manufacturers Association.



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