

## Alan J. Higgins, Ph.D.

### SUMMARY

- Seasoned pharmaceutical R&D professional with strong business orientation and extensive experience in major multinational pharmaceutical corporations and biotechnology companies in the US, UK and Canada, plus several years operating as an independent strategic consultant
- Proven record of achievement in drug discovery and development
- Specialized skills in metabolism and cardiovascular diseases, and also in multiple other therapeutic areas
- Responsibilities have extended across all of preclinical R&D, with experience also in clinical trials, strategic planning and portfolio management
- A strong collaborative leader, decision maker and team builder who specializes in integrating high quality innovative science with medical needs and commercial opportunities

### PROFESSIONAL EXPERIENCE

#### **BASKERVILLE CONSULTING, Chapel Hill, NC**

**2010-Present**

##### *Principal*

- Ensuring development plans are focused on a well-defined viable target profile
- Achieving proof of concept as rapidly and efficiently as possible
  - Bridging animal studies to the clinic, utilization of appropriate biomarker strategies, combination of efficacy and toxicity endpoints, establishing PK/PD relationships

#### **VIAMET PHARMACEUTICALS, INC., Morrisville, NC**

**2007 – 2010**

##### *Vice President, Preclinical Development*

- Established and ran test systems that provided all biological data to support a highly successful Series B financing
- Identified vendors, negotiated and established cost-effective test systems that enabled extension of the Series A runway to two years
- Recruited several scientific advisory board members

#### **COGENICS, INC. (formerly Paradigm Genetics then Icoria), Morrisville, NC**

**2003 – 2007**

##### *Senior Director, Translational Medicine*

- Directed the development of a robust, streamlined metabolomics platform and applied it to biomarker discovery in various therapeutic and translational applications
- Led proof-of concept studies in liver disease and toxicology
- Presented results and business cases at conferences and to potential partners and played a major role in development and closing of new contracts
- Principal Investigator on two Phase II SBIR contracts (drug-induced liver toxicity and alcohol toxicity in liver and brain) with total funding over \$2M

#### **NOBEX CORPORATION, Research Triangle Park, NC**

**2000 – 2003**

##### *Senior Director, Pharmacology*

- Directed all non-clinical biology (pharmacology, toxicology, metabolism and kinetics)
- Selected a new development candidate and took it to a successful IND, all within 12 months
- Developed an understanding of how Nobex's core technology improves oral bioavailability
- Conceived and implemented compound evaluation and selection schemes for five new projects
- Responsible for Pharm/Tox sections in due diligence and Business Development discussions
- Managed expectations of clients and partners
- Member of Executive Team and Project Review Committee

#### **PHARMACEUTICAL CONSULTANT**

**1994 – 1995 & 1997 – 2000**

- Projects included strategic planning, R&D portfolio management, market, competition and opportunity evaluations, technology assessment, drug development plans, due diligence and professional writing

#### **ALLELIX BIOPHARMACEUTICALS INC., Mississauga, Ontario**

**1995 – 1997**

##### *Director, Transcription Therapeutics SBU (1996 – 1997)*

##### *Research Director (1995 – 1996)*

- Consolidated research programs and focused technology into two main therapeutic areas
- Built new multidisciplinary teams, and implemented staff development programs
- Directed and accelerated Phase I/II trials of ALX40-4C in HIV and CMV
- Established an array-based technology platform for discovery of novel targets and drugs
- Created a business plan for the Transcription Therapeutics SBU

ONCOGENE SCIENCE INC., Uniondale, NY

1993 – 1994

*Director, Pharmacology and Drug Development*

- Directed major screening collaborations with Marion Merrell Dow and Wyeth Ayerst

HOFFMANN-LA ROCHE INC., Nutley, NJ

1988 – 1993

*Director, Metabolic Diseases Research (1992 – 1993)*

*Director, Cardiovascular and Neurobiology Research (1992)*

*Director, Cardiovascular Research (1988 – 1992)*

- Recruited six new PhDs and built Cardiovascular Research into a strong, integrated department
- Established a \$1.5 million collaboration with a leading academic Cardiology division to give Roche access to cutting-edge clinical and preclinical research and to facilitate rapid early clinical evaluation of cardiovascular development candidates
- Instrumental in establishing and overseeing a major interdisciplinary project on adhesion molecules. This group was the first to crystallize and solve the 3-D structure of a selectin
- Represented worldwide Preclinical Research on a multidisciplinary team that developed a plan (OPEX) to compress time-to-market by around four years
- Wrote pharmacology sections for an IND and an NDA
- Established new animal models of myocardial ischemia that were more reproducible, relevant, flexible and efficient than those used previously

PFIZER CENTRAL RESEARCH, Sandwich, Kent, UK

1969 – 1988

*Section Head, Discovery Biology (1986 – 1988)*

*Principal Research Scientist (1983 – 1986)*

*Senior Research Scientist (1978 – 1983)*

*Research Scientist (1976 – 1978)*

*Senior Experimental Scientist (1973 – 1976)*

*Experimental Scientist (1969 – 1973)*

- Originated and directed an antiarrhythmic project that produced three development candidates within only five years of initiation. One of these, dofetilide (Tikosyn®), is a potent, selective cardiac potassium channel blocker that has become an industry standard
- Initiated a promotional pharmacology plan to support development and marketing of novel Class III antiarrhythmics by demonstrating superiority over existing therapy with respect to both efficacy and safety
- Wrote the pharmacology section for a Class III antiarrhythmic drug CTX
- Established two consultancies with US opinion leaders to improve Pfizer's visibility and provide access to the latest scientific developments and technology
- Significant role in the discovery and early development of amlodipine (Norvasc®), a calcium channel blocker, which became one of the largest selling cardiovascular medicines in the world (peak sales over \$4 billion per year)
- Based on demographic and market trends, created a position paper recommending new research indications and targets for Pfizer. These ideas ultimately led to the development of Viagra®
- Directed the formation of a new project team, and development of systems to identify and profile novel modulators of the fibrinolytic system
- Discovered the mechanism of action of oxfenicine and devised a comprehensive hypothesis to explain the unexpected increases observed in coronary blood flow and cardiac muscle mass

## EDUCATION

- *B.Sc. in Biochemistry*, University of Edinburgh, 1969
- *Ph.D. in Pharmacology*, Council for National Academic Awards, 1979
  - Thesis entitled "Myocardial Lipid and Carbohydrate Metabolism in Relation to the Ischemic Heart" (external examiner Prof. Michael F. Oliver)

## ADDITIONAL INFORMATION

- Adjunct Associate Professor, University of North Carolina, School of Pharmacy, 2008 – Present
- Chairmanship or membership of various committees, review boards and task forces
- Member of Board of Directors, Women in Science Tomorrow (WIST)
- Affiliations with leading professional societies in US and Europe (Br Pharmacol Soc, Br Soc Cardiovasc Res (Hon. Member), Am Heart Assoc.)
- Member of Metabolomics Society Technical Advisory Board, 2004 – 2008
- Organized and chaired four scientific symposia for professional societies
- Ad hoc reviewer for leading scientific journals
- Publications in peer-reviewed journals