

# Drug Discovery and Development Consultants Ltd

An introduction: Who we are and what we do

## **Overview**



A scientific consultancy based upon the partnership's capability of providing a specialist solution for those looking for expert advice and support across all aspects of drug discovery and development

#### **Core competencies** of the 3D Consultants team :

- In vitro/in vivo biology
- Medicinal chemistry
- Preclinical development (DMPK, CMC, tox, scale-up, clin pharm)
- Clinical development (translational medicine, clin ops, regulatory approval)

As a team having worked together for many years on large multidisciplinary projects, we can provide efficiencies in ensuring cost-effective and timely delivery of our clients' objectives

## **Our Services and Deliverables**



#### **Project Leadership and Project Management/Mentoring**

- Leading and managing projects from target ID through clinical phases
- Successful projects delivered across a spectrum of therapeutic areas with a focus on CNS (neurodegeneration, cognition), pain and inflammation
- Built up an extensive network of trusted CROs

#### **Due Diligence**

 Broad experience in carrying out due diligence campaigns to support in-licencing/out-licencing assets, technologies and companies

#### **Supporting Company Start-Ups and Sales**

 Experience as CEOs, directors and founders of start-ups, able to support starting/selling companies (including fundraising campaigns)

# **Our History So Far**



- Company was founded in June 2018 in Cambridge UK
- Currently have 13 consultants, looking to expand further to add new competencies and broaden depth of expertise/experience
- We have worked with a broad range of clients including:





























# Our **Expertise**

Company Start-Up

> Target ID and **Validation**

#### M Ashwood S Burbidge









**Pre-Clinical Development** DMPK, CMC, Tox, Project Management

S Snape

A Morgan

M Duffy

**H** Done

Lead

Generation and Optimisation

**Pre-Clinical** 

Development







**Clinical Development** Trial design, management and operations

**M Pritchard I Gonzalez** 



M Higginbottom

**Discovery Sciences** Med Chem, CMC, in Vitro/in Vivo Biology

**B** Pullman



**Translational Medicine** Clin Pharm, Dev and Regulatory Sciences

Clinical Development

**Asset** Out-Licencing/ Company Sale

**T Sparey B** Hardiman



**Business and Corporate Development**, fundraising

#### The 3DConsultants Team

#### **Directors**





Martyn
Pritchard
Director
Discovery and
Dev. Chemistry



Gonzalez
Director
Discovery
Biology

Isabel



Mike
Higginbottom
Director
Medicinal
Chemistry/CMC



Stephen
Burbidge
Director
Discovery and
Pre-clinical Projects

## The 3D Consultants Team



#### **Associate Members - Business Development and Commercial**



**Tim Sparey**Business development,
supporting corporate
strategy and
development, fundraising



Bradley Hardiman
Commercialising research
through University spin
outs, business
development, licensing

#### The 3D Consultants Team



#### **Associate Members - Pre-Clinical Development and Translational Medicine**



Mike Ashwood
CMC,
process development,
supporting regulatory
approvals



Bruce Campbell
DMPK,
safety pharmacology,
pre-clinical and clinical
development



**Bill Pullman**Clin dev, biologicals,
drug repurposing,
regulatory strategy and
approvals onto market

## The 3D Consultants Team

#### **Associate Members - Clinical**



Maeve Duffy
Clinical Operations and
Development, NCEs,
formulated investigational
medicinal products



Allison Morgan
Clinical Development
Translational programme
design, genetic disorders,
biologicals



Sue Snape
Clinical Development
Drug repurposing,
inflammatory diseases,
drug device development



Hilary Done
Clinical Operations
Managed trials for biotech
and pharma from Phase I
through to Phase III

#### **Track Record of Team**



- The 3D Consultants team has worked together in companies including GSK, Novartis, Pfizer, Parke-Davis, Proximagen and Cambridge Biotechnology Ltd
- Broad understanding of most therapeutic areas
  - Particular focus and extensive experience in CNS, pain and inflammation
  - Also direct experience in neurodegeneration, cognition, IBD, metabolism and cancer
  - Broad clinical expertise but with focus on rare diseases, genetic disorders, drug repurposing, paediatric medicine and drug device development
- Our consultants have held key executive positions including CEO, research director, head of site, VP and functional area heads of med chem, biology and clinical development - broad experience in managing companies.

# **Our Collective Experience**



- Identification and prioritisation of drug targets and technologies
- Drug discovery activities through hit ID, LG, LO and candidate nomination
- Non-clinical development campaigns: pharmacology, DMPK, drug candidate scale-up, CMC, process development, exploratory and GLP tox
- Programme leadership/management/budget/project planning
- Executing projects as a virtual team from discovery through Phase 2 PoC
- Clinical Operations for First in Human and Phase 2 PoC
- Quality Management Systems, regulatory and QA advice
- In-licensing and out-licensing activities including due diligence support
- Working in partnerships with big pharma, biotechs and CROs
- Company start-ups and sales including the preparation of business plans

## **Case Studies I**



The 3D team has worked on a variety of contracts for a range of clients from investment fund managers to pharma companies and include the following as examples of the work undertaken -

- Operational support for the management of a first in human Phase I study
- Operational support of asset in Phase II clinical development
- Preclinical support and management of GLP tox-ready project
- Due diligence review of pre-clinical package and CMC sections of a potential in-licencing asset
- Providing due diligence as well as supporting Pls/projects/grant proposals for a US-based charity focusing on neurodegeneration

## **Case Studies II**



- Generation of a report and presentation to potential investors for repurposing of a clinical stage asset with inclusion of business plan, timelines and budget to clinical milestones.
- Provision of mechanism of action rationale, current status and potential future development options to support additional indications of a novel CNS drug candidate.
- Literature review of potential new indication of an existing asset with a novel mechanism of action.
- Review of literature and proprietary data package for investment fund manager of early stage pre-clinical asset of a potential NewCo.

## Representative Testimonials



- "3D consultants have provided us with timely, high quality consultancy with the exact skills we required and a flexibility reflecting early stage life sciences operations. We would highly recommend' Closed Loop Medicine, UK
- "We have the privilege of recommending 3D Consultants based on our long-standing professional interactions with them. 3D consultants are highly experienced scientists with competencies across core drug discovery, preclinical development, and early clinical development disciplines. Without reservation we are happy to recommend 3D consultants for their scientific expertise, decision making prowess, high professional integrity in delivering quality work, and for their responsiveness and commitment to our urgent timelines." Proximagen LLC, USA
- "3D provided us with project management and operational support for a first in human Phase I study. The practical experience of 3D was obvious from the start with an ability to immediately integrate into our team and work effectively with external CROs in a cooperative and productive manner to deliver the study on time and in budget. "I have previously worked with the 3D team and know from direct experience that they take a hands-on, pragmatic approach to early drug development, drawing on a wealth of experience to deliver results" CEO of European Biotech
- "Engaging 3D at the Tau Consortium has provided us with deep pharmaceutical and drug discovery expertise, critical as we take our drug discovery portfolio from Academia to a rigorous drug discovery setting. Their multidisciplinary approach has proven very useful in performing due diligence on a set of projects, where that collective expertise was critical. We are looking to continue to engage 3D on oversight of integrated drug discovery programs working with external CROs and collaborators. 3D takes a hands-on, pragmatic approach that draws on a wealth of experience to deliver results". Tau Consortium/Rainwater Charitable Foundation, USA

## How We Can Help You



- Our team benefits from many years experience of working together and leading project teams in both pharma and biotech
- The team has a successful and broad track record of delivering drug candidates through into clinical phases
- Our consultants have expertise and experience across a broad range of disease areas, with a focus on the CNS, inflammation and pain
- We are able to provide a point source of skill sets capable of providing support and mentoring to PIs/project teams from target ID through to clinical development planning and operations

We can support you in transforming breakthrough discoveries into drugs



# **Supporting Slides and Biographies**

## **Stephen Burbidge**

#### **Director, Discovery and Preclinical Projects**

**Dr Stephen Burbidge** has over 20 years experience within the pharmaceutical industry, working in both biotech and large multi-national pharma organisations, including GlaxoWellcome and GlaxoSmithKline. From 2009 he worked at Proximagen Ltd, where he held the role of Head of Discovery and Preclinical Projects for the last four years. During this period, he led multiple Discovery and preclinical stage programmes leading to the selection of multiple clinical candidates, including a VAP-1 inhibitor which is now in Phase 2 clinical development, licensed to Roche. Dr Burbidge supported all preclinical activities at Proximagen, including executing multiple non-GLP and GLP toxicology studies and supporting due diligence. Dr Burbidge has authored a number of publications. He received his BSc and PhD from the University of Warwick (UK).





## **Isabel Gonzalez**

# 3D CON

#### **Director, Discovery Biology**

Dr Isabel Gonzalez has over 30 years of research experience, resulting in more than 50 publications. She combines 12 years experience in University research laboratories and 20 years of experience in the pharmaceutical industry, in three different multinational companies (Parke-Davis/Pfizer, Novartis and GSK) and one biotechnology company (Proximagen, currently BenevolentAI), where she was Head of Biology for the last 9 years. Isabel specialises in the areas of pain, inflammation and neurodegeneration and she has been a successful project leader, with a proven track record of achievements across all these organisations. She has a deep knowledge of all Home Office licences and regulations. Isabel is a Graduate of the Universidad Complutense, Madrid (Spain) where she studied biology and completed a PhD in Animal Physiology in 1990.



## Mike Higginbottom

#### **Director, Medicinal Chemistry and CMC**

Mike Higginbottom has over 30 years of Drug Discovery and Development experience in a number of companies ranging from big Pharma to small Biotechs (Parke Davis/Pfizer/ Cambridge Biotechnology/ Biovitrum/ Proximagen/ Upsher Smith/ BenevolentAI). During this time Mike has contributed to over 35 patents covering the invention of new chemical entities, over 20 publications in peer reviewed journals and 5 drug discovery programmes taken into into clinical development. Mike graduated from York University in 1986 where he studied chemistry. Mike was a founding member of Cambridge Biotechnology Ltd. and has been Head of Chemistry for the past eleven years, managing a variety of CROs, developing in-house compound collections, managing API campaigns and supporting regulatory filing and due diligence.





## **Martyn Pritchard**

# **Director, Discovery and Development Chemistry**

Dr Martyn Pritchard was head of R and D at Proximagen from 2012 through to its acquisition in early 2018, where he was responsible for managing almost 50 scientists, an annual budget of ~£15M and programmes spanning from early discovery through to Phase 2. Prior to his years at Proximagen he was a founding member of Cambridge Biotechnology Ltd, where he was a key member of the team responsible for raising over £10M in investment funding and managing its subsequent acquisitions by Biovitrum, Proximagen and Upsher Smith. Martyn is a Graduate of the University of Wales, Swansea, studying chemistry and completing a PhD in organic chemistry in 1985 before undertaking Postdoctoral Fellowships in Southampton and Cambridge. Martyn is an author of over 50 papers and is a named inventor on in excess of 20 patents.



