

June 22, 2023

To: John Reynolds and Tanya Sharpee, ApCom

Re: Renewal of Adjunct appointment – Professor Christopher Liddle

Dear John and Tanya:

Dannie Engle and I would like to request the renewal of Professor Christopher Liddle's Adjunct Professor appointment. Chris runs clinical and research programs at the University of Sydney, where he is a Professor and Head of Clinical Pharmacology and Hepatology.

Chris spent a very productive 3-month sabbatical at the Salk in 2010, and since then has continued to collaborate with my lab, including annual multi-week visits until the COVID shutdown.

Chris is a valuable consultant and will provide significant support on our recently awarded P01 application entitled "*Overcoming mechanisms of therapeutic resistance in pancreatic ductal adenocarcinoma.*" This project involves my lab and the labs of Tony Hunter, Reuben Shaw, Dannie Engle, Sue Kaech, Geoff Wahl and Clodagh O'Shea, as well as our UCSD colleagues Andy Lowy (Director of Surgery and Oncology), Herve Tiriach, Karen Messer, Xinlian Zhang, Mojgan Hosseini (Co-Director of Surgical Pathology) and collaborators Liz Jaffee and Nilo Azad at Johns Hopkins. Chris supports my lab's FXR research by analyzing Bile Acids via Mass Spec Analysis, and our UCSD collaborative projects such as characterizing the RNA transcriptome. He supports Geoff Wahl's and Dannie Engle's group by analyzing RNAseq and ATACseq and continues to provide invaluable assistance in setting up the bioinformatic analysis pipeline. Chris actively manages the computer hardware and software of the servers used for single cell RNAseq, bulk RNAseq, ATACseq and ChIPseq for analysis pipelines and archival. In addition, Chris has contributed and will continue to offer his support for the Salk Cancer Center (see letter from Reuben Shaw) with participation in the P01 and Lustgarten Grants.

As you can see from the above, Chris is a productive and engaged collaborator, and a valuable addition to our roster of distinguished Adjunct Professors.

Sincerely,

Ron

cc: Dannie Engle, Co-Sponsor
Tom Brazda, ApCom Administrator

Salk Adjunct Service/Contributions Form

Name:

Appointment Start Date:

Sponsors:

To be eligible for appointment and reappointment in the Adjunct series, appointees are expected to be engaged in **at least two** Institute-related activities outlined below. If you are being considered for your first Adjunct Professor appointment, provide information about your plans to engage in the Salk community and select any of the activities you would be interested in below. If you are being considered for reappointment, select your ongoing activities and give a brief summary of your engagement in each activity during the past appointment period. Also provide a summary of your plans to engage in the Salk activities during the next appointment period.

Salk Activities (list the course/seminar titles, committees, and student names if known)

** Please note research collaborations with a Salk Faculty sponsor(s) do not qualify as Institute-related activities expected for an Adjunct position*

- ☐ Giving Seminars, such as those hosted by Sponsors or by the Institute
- ☐ Teaching in Salk-organized courses
- ☐ Serving on UCSD Student Review committees and/or Thesis Committees in Salk Labs
- ☐ Reviewing Postdoctoral and other Internal Grants
- ☐ Participating in Salk's outreach and educational efforts to recruit underrepresented minority student applicants

- ☐ Consulting on Salk scientific initiatives or multi-PI grants
- ☐ Serving on Faculty Review Committees
- ☐ Promoting award and nomination opportunities for Salk Faculty
- ☐ Organizing or participating on Salk Meetings or Conferences
- ☐ Other

Salk Service Summary & Plans: Describe your plans to engage in the activities marked above during the next appointment period (i.e.: Salk Course or Seminar Titles, names of Student or Faculty review committee, description of contributions to grants, etc. if unable to fit above). If you are being considered for reappointment, also describe your engagement in the Salk activities during the last appointment period. You may attach a supplemental letter with these activities as needed.

Christopher Liddle BSc(Med)(Hons), MB.BS(Hons), PhD, FRACP, FAASLD**Contact Details**

Sydney School of Medicine and Department of Clinical Pharmacology and Toxicology, University of Sydney at Westmead Hospital, Westmead NSW 2145, Australia

Phone: +61 4 22006285 **Email:** chris.liddle@sydney.edu.au

Web: <http://sydney.edu.au/medicine/people/academics/profiles/chris.liddle.php>

Personal Information

Date of birth: 24th July, 1955. Place of birth: Sydney, Australia. Nationality: Australian.

Academic Qualifications

BSc(Med) (Hons I)	University of N.S.W.	1978
MB.BS (Hons II)	University of N.S.W.	1980
FRACP	College of Physicians	1986
PhD	University of Sydney	1991

Current Appointments (presently on long service leave)

Professor of Clinical Pharmacology and Hepatology, University of Sydney School of Medicine, (since 2006)

Head, Department of Clinical Pharmacology and Toxicology, Westmead Hospital (since 1994)

Consultant Clinical Pharmacologist and Toxicologist, Westmead Hospital (since 1994).

Consultant Gastroenterologist and Hepatologist, Westmead Hospital (since 1991).

Principal Investigator and Founding Member, Storr Liver Centre, Westmead Institute for Medical Research (since 1993).

Adjunct Professor, The Salk Institute for Biological Studies, La Jolla, CA, USA (since 2010).

Member, Intellectual Property Committee, Children's Medical Research Institute (since 2018).

Member, Westmead Institute for Medical Research Data Replication Working Group (since 2022).

Previous Appointments and Positions Held

1985 **President, Resident Medical Officers Association**, Westmead Hospital

1988-90 **Visiting Gastroenterologist**, Gastroenterology and Liver Unit, Westmead Hospital

1989-90 **Clinical Superintendent in Medicine**, Westmead Hospital

1990-91 **Post-Doctoral Researcher**, Department of Medical Nutrition, Karolinska Institute, Huddinge University Hospital, Huddinge, Sweden

1992-94 **Bushell Post-Doctoral Research Fellow in Gastroenterology**, Gastroenterological Society of Australia and University of Sydney at Westmead Hospital, Westmead Australia.

1994-98 **Senior Lecturer in Clinical Pharmacology and Medicine**, University of Sydney at Westmead Hospital, Westmead, Australia.

1994-08 **Director, Drugs and Toxicology Laboratory**, Institute of Clinical Pathology and Medical Research, Western Sydney Local Health District and Westmead Hospital.

1994-21 **Member**, Drug Committee, Western Sydney Local Health District

2000-02 **Sub-Dean, Information Technology**, Faculty of Medicine, University of Sydney

1999-05 **Associate Professor of Clinical Pharmacology and Hepatology**, Faculty of Medicine, University of Sydney

2005-10 **Associate Dean, Information Technology**, Faculty of Medicine, University of Sydney

2012-16 **Lead Clinician and Steering Committee Chairman**, Electronic Medication Management Program, NSW Ministry of Health, Program budget \$170M.

2007-19 **Chairman**, Drug Committee, Western Sydney Local Health District and Westmead Hospital

2011-19 **Chairman**, New South Wales Therapeutic Advisory Group

2016-19 **Chairman**, Medical Staff Council, Westmead Hospital, Western Sydney Local Health District

2016-19 Member, ex officio, Western Sydney Local Health District Board

2016-21 Chairman, Electronic Health Record Committee, Western Sydney Local Health District

2019-21 Co-Chairman, Medical Staff Executive Council, Western Sydney Local Health District

Awards and Scholarships

Young Investigator Award, for best research paper, Annual Scientific Meeting of the Gastroenterological Society of Australia, 1987

B.J. Amos Travelling Fellowship, The Westmead Association, Westmead Hospital, 1990

J.J. Billings RACP Travelling Fellowship, Royal Australasian College of Physicians, 1990

Visiting Scientist Scholarship, Karolinska Institute, Stockholm, Sweden, 1990-91

Bushell Senior Research Fellowship, Gastroenterological Society of Australia, 1991-94

Travelling Scholarship, The Swedish Institute, Stockholm, Sweden, 1998

Adjunct Professor, Salk Institute for Biological Studies, La Jolla CA, USA, 2010 - present

Fellow of the American Association for the Study of Liver Diseases (FAASLD), elected 2014

Distinguished Professorial Achievement Award, Sydney Medical School, University of Sydney, 2015

Distinguished Service Award, Research and Education Network, Western Sydney Local Health District, 2015

Research

Research Metrics

h-index = 68 i10 index = 158 Career citations > 22,600 Citations in 2022 = 2030

Research Funding

30 Competitive Research Grants as a chief investigator (16 as CIA)

Total value of Chief Investigator Research Grants \$13,653,215

Publications

180 peer reviewed publications to date. In the period 2012 – 2022: 94 published papers including **6 papers in Nature, 2 in Nature Medicine, 6 in PNAS and 5 in Cell, plus a highly cited review in Nature Medicine** (cited > 1,800 times). Four manuscripts currently under review by the following journals: *Cell, JCI Insight, Science Advances, Nature Communications*.

Invited Talks, Oral Conference Presentations and Conference Session Chair

40 instances over the period 2000 – 2018.

Patents

Patent family 1: "A METHOD FOR DETECTING/SCREENING DRUGS THAT ARE INDUCERS OF CYTOCHROME P450 3A4 AND CAN CAUSE DRUG-DRUG INTERACTIONS". Status: Granted - licenced to industry through University of Sydney.

Patent family 2: "TRANSGENIC ANIMALS FOR ANALYZING CYP3A4 CYTOCHROME P450 GENE REGULATION". Status: Granted - licenced to industry through University of Sydney.

Patent family 3: "USE OF VITAMIN D RECEPTOR AGONISTS, LIGANDS, AND PRECURSORS TO TREAT PANCREATIC FIBROSIS". Status: Granted - Phase I clinical trial completed.

Patent family 4: "VITAMIN D RECEPTOR/SMAD GENOMIC CIRCUIT GATES FIBROTIC RESPONSE". Status: Granted.

Patent family 5a: "FXR AGONISTS AND METHODS FOR MAKING AND USING". Status: Granted - company set up to exploit IP.

Patent family 5b: "ANALOGS OF FEXARAMINE AND METHODS OF MAKING AND USING" Status: Granted - company set up to exploit IP.

Teaching and Mentoring

Bedside teaching – over 30 years' experience of bedside teaching and tutorials for medical students and physician trainees, encompassing physical examination, history taking and clinical reasoning.

Lecturing – over 30 years' experience in didactic lecturing, covering gastroenterology, hepatology and pharmacology.

Pre-internship – established a series of tutorials for final year medical students at the Westmead Clinical School, covering medication safety and rational prescribing, taught in conjunction with hospital pharmacists.

MD program – project supervisor for MD research projects including a Dean's Prize winner in 2018.

PhD supervisor – supervisor of multiple successful PhD students with four going on to be internationally recognised researchers or senior research program leaders within Pharma.

Physician basic trainees – tutorials in clinical pharmacology

Physician advanced trainees – training supervisor for multiple gastroenterology and clinical pharmacology advanced trainees.

Early career researchers – mentoring and support in career progression, grant writing, genomics and bioinformatics for scientists in the Westmead Institute for Medical Research.

Leadership roles*Information technology*

- Led the integration of information technology into the Sydney Graduate Medical Program as a Sub-Dean (2000 – 2002) then as an Associate Dean (2005 – 2010) for Information Technology.
- Led the data networking of the University of Sydney Clinical Schools, Rural Clinical Schools and affiliated Research Institutes (1997 – 2009)
- Member, Dean's Advisory Committee, Faculty of Medicine (2005 – 2010).
- Clinical lead and steering committee chair, eHealth NSW electronic medication management program (2012 – 2016), budget \$170M.

Medication safety, Quality Use of Medicines and Toxicology

- Member, Western Sydney Local Health District Drug Committee (1994 – 2021)
- Established the Toxicology inpatient service at Westmead Hospital (1997)
- Co-author, Therapeutic Guidelines Gastroenterology (2002)
- Member, NSW Health Medication Expert Advisory Group (2008 – 2012)
- Chairman, Western Sydney Local Health District Drug Committee (2007– 2019)
- Chairman, NSW Therapeutic Advisory Group (2011 – 2019)

Clinical Governance

- Chairman, Westmead Hospital Medical Staff Council (2016 – 2019).
- Co Chairman, Western Sydney Local Health District Executive Medical Staff Council (2019 –21).
- Member, ex-officio, Western Sydney Local Health District Board (2016 – 2019).
- Member, NSW Executive Medical Staff Council (2016 – 2020)

Community Engagement*NSW Police Service*

- Advisor to the NSW Police Service regarding substance abuse (1997 – 2010)
- Co-author of "An Independent Research Study into Prohibited Drug Use within The New South Wales Police Service". Commissioned by the NSW Police Service under terms laid down by The Wood's Royal Commission into The NSW Police Service. Presented to Parliament Nov 1998.

TV and Radio interviews (last 10 years)

- New insights into circadian rhythms (ABC Radio National, 2012)
- Fexaramine, a potential new therapy for obesity and type 2 diabetes (Channel 9 News, 2015)
- Insulin producing cells created in a dish could transform diabetes treatment (ABC News, 2016)

Subject: Adjunct renewal for Chris Liddle

Date: Thursday, June 22, 2023 at 12:26:46 PM Pacific Daylight Time

From: Reuben Shaw

To: Ron Evans

Dear ApCom,

I am happy to write this letter in strong support for the renewal of Dr. Christopher Liddle's Adjunct Professor Appointment. Dr. Liddle is an excellent collaborator and contributor to the science in my lab as well as to several other Cancer Center Labs. He was a great consultant during the submission of the recently awarded PO1 and will continue to be an important part of the Bioinformatics Team for the PO1. He also plays a major role in our Lustgarten Foundation Grant.

Chris actively manages the computer hardware comprising the servers that are used for single cell RNAseq, bulk RNAseq as well as ATACseq and ChIPseq. He continually updates the software for analyses pipelines and archival. It would be a tragedy to lose Chris' assistance.

I strongly advocate that ApCom renew Dr. Liddle's Adjunct Professor Position.

Sincerely,
Reuben Shaw