

Update from the UCSF HDFCCC Preclinical Therapeutics Core Facility, August 2021:

As you are all aware Byron Hann MD PhD retired as PTC Core Manager at the end of 2020. He is greatly missed on both a personal and professional level. However, Byron set us up well for transition. We have been busy re-building the Core in terms of hiring new personnel and acquisition of new equipment to meet the growing demands of our clients, enhance our research studies, and meet the stringent regulations demanded by IACUC and AAALAC.

New Staff:

After an international search, Veronica Steri PhD was selected as PTC Core Manager, taking on this role in mid-February. Veronica is well known to most PTC users. Originally from Italy, she obtained a PhD from *University of East Anglia*, and trained as a post-doc in Gabriele Bergers lab, before serving as Lab Manager for Mark Moasser, followed by training a further three years within the PTC.



Veronica



In October 2020, Hunter Vinsonhaler, an outstanding graduate from *UC Irvine*, joined the PTC as a junior specialist. She trained fast, and immediately became a pivotal player in meeting the growing demand for PTC services. Hunter is currently on leave but will return towards the end of this year.

Hunter

Juan Antonio Camara Serrano DVM PhD joined us on June 1st 2021 as a In vivo Imaging Specialist from the internationally renowned Vall d'Hebron Research Institute in Barcelona, Spain, where he ran a small animal imaging core. He trained as a DVM at *Universidad Complutense de Madrid*, before obtaining a PhD in Small Animal Imaging from the same Institution. He has worked with Mariano Barbacid at the Centro Nacional de Investigaciones Oncológicas (CNIO), and more recently with Joan Seoane and Laura Soucek in Barcelona.



Juan Antonio



Paul



Fernando

Paul Phojanakong (Lab Manager) and Fernando Salangsang (Specialist) continue their long-standing tenure with the PTC.

Sadly, we say farewell to Dong Hui Wang who has been at UCSF 20 years, and with the PTC since its inception 15 years ago. We wish her well in her future endeavors.

Instrumentation:

In December 2019, the PTC installed a **Quantum GTX** micro-CT scanner, funded through grants from the NIH (S10), UCSF *Research Resource Program*, and a contribution from HDFCCC. This dedicated microCT enables fast, high-resolution three-dimensional X-ray images of both samples and living mice with spatial resolutions up to 2.3 μ m. The potential applications include detection and monitoring of tumors in different organs like lung, bone, liver, pancreas, or breast. Other uses include measurement of fibrotic/desmoplastic response in tumor models; assessment of pulmonary function and viable lung tissue; and determination of biodistribution of novel drug delivery vectors (e.g., gold nanoparticles).



In December 2020, we installed an **XRAD-320** irradiator, a self-contained X-ray system designed to deliver a precise radiation dosage to specimens from cells to small animals to replace our Cesium source. It offers a large chamber within a compact cabinet footprint and features a highly homogenous beam with an adjustable X-ray collimator, beam hardening filters, and a user-friendly touch screen control panel.

This complements our **Small Animal Radiation Research Platform (SARRP)** uCT-guided Precision Irradiator (HD-537), installed in 2018 with funding from NIH (S10), PBBR, the UCSF Research Resource Program grants, and HDFCCC.



In June 2021, PTC installed a new **IVIS Lumina** optical imaging system, dedicated for use within the super-clean immunocompetent mouse room, HD503, at the Helen Diller Cancer Research Building. This instrument accommodates fluorescent reporters and offers single view 2D tomography for both fluorescent and bioluminescent reporters. This acquisition was funded through a major donation from HDFCCC as well as by generous individual contributions from Drs. Grandis, Lo, Okada, Sweet-Cordera, and the PTC. It complements our suite of IVIS imagers located in HD538, PSB554, and S071.

We strongly encourage everyone to make use of our suite of imaging and therapeutic delivery instrumentation at HDFCRB and Parnassus.

For information on the above, and on our **Vevo 2100** (HD527) and **Vevo 770** (PSB554) High Frequency Ultrasounds, and **Leica Fluorescent Microscope**, please go to cancer.ucsf.edu/research/cores/preclinical and/or chat with Juan Antonio (juanantonio.CamaraSerrano@ucsf.edu) or Veronica (veronica.steri@ucsf.edu).

PTC is here to serve the membership of HDFCCC, particularly in enabling NCI-funded projects, but open to any projects.

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For comments and suggestions on PTC or the HDFCRB LARC facility contact: rosemary.akhurst@ucsf.edu

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