**A. L V PRASAD EYE INSTITUTE (LVPEI) - HYDERABAD**

**1. OPHTHALMIC NURSE ASSISTANT (ONA) TRAINING (ongoing)**

**What:** Developing learning modules in Blackboard for nurse tutors at LVPEI to use in their curriculum for ONAs.

**Who at UR:** Terry Meacham, Robert Dorman, Kathy Rideout.

**Who at LVPEI:** Chetanya Nelluri, Dr. Avinash Pathengay.

**How:** Monthly Zoom/Phone calls to review work progress with LVPEI, annual site visits (completed 6-11th Feb 2017).

**Funding:** LVPEI pays for visits and nurse time to develop training modules.

**Next:** Introducing training/simulation and continuing medical education.

**2. OPHTHALMIC PHOTOGRAPHER TRAINING (ongoing)**

**What:** Training of optometrists in standard imaging practices starting with retinal imaging to develop standards for consistent clinical care and for meeting needs of research protocols.

**Who at UR:** Rajeev Ramchandran, for Feb 2017 visit Jenny Kellogg.

**Who at RIT:** Christye Sisson (Chair of Photographic Sciences).

**Who at LVPEI:** Drs. Raja Narayanan, Rajeev Reddy, Avinash Pathengay.

**How:** After needs assessment, first ophthalmic photography course at LVPEI Feb 6-10th for optometrists.

**Funding:** LVPEI paid for Christye and Jenny to train at LVPEI during Feb 6-10th.

**Next:** Further training TBD by LVPEI.

**3. STUDENT EXTERNSHIP (ongoing)**

**What:** Undergrad and Medical Student 6-week summer health and technology experience (June-July) in Hyderabad at LVPEI.

**Who at UR:** Four undergraduate students (2 optics/engineering; 2 public health) and two medical students. Tynelle Stewart (Assistant Dean & Director, Office of Education Abroad), Ted Pagano (Associate Director, Center for Education Abroad), Adrienne Morgan (URMC).

**Who at LVPEI:** Dr. Rohit Khanna, Ashutosh Ricchariya, Chetanya Nelluri, Dr. Avinash Pathengay.

**How:** Annual selection process by Feb. An Agreement between UR-LVPEI is executed.

**Funding:** For undergraduates various UR grants; medical students ($3K anticipated). LVPEI subsidizes housing and supports faculty time for mentorship.

**Next:** Medical student selection Adrienne Morgan; undergraduate selection by LVPEI with Ted Pagano/Dr. Rajeev Ramachandran.

**4. “MINE” - MICROSOFT INTELLIGENT NETWORK FOR EYECARE (commenced Dec 2016)**

**What:** Employs artificial intelligence/machine learning to collect and analyze health data primarily from EMR systems to identify trends and patterns of disease, their spread, and response to treatment to improve health outcomes globally.

**Who at UR:** Dr. Steven Feldon (Chair), Dr. Rajeev Ramchandran (Faculty Lead).

**Who in Consortium:** Headed by LVPEI (Dr. Vipin Anthony Das), Flaum Eye Institute (Dr. Ramchandran), Brien Holden Vision Institute (Australia), Bascom Palmer (University of Miami), Federal University of Sao Paulo (Brazil).

**How:** Uses Microsoft Azure cloud which will host the data and will provide machine learning and analytical tools to consortium.

**Funding:** Each institution responsible for funding its data collection and link to Microsoft Azure cloud. Grants from scientific agencies and foundations to be sought jointly.

**5. JOINT ADAPTIVE OPTICS RESEARCH (complete)**

**What:** Design, develop, and deploy an Adaptive Optics (AO) system to investigate questions related to pathophysiology of retinal diseases, including those vascular in nature such as diabetic retinopathy, seen in sizeable populations at LVPEI.

**Who at UR:** David Williams.

**Who at LVPEI:** Ashutosh Ricchariya, Dr. G. N. Rao.

**How:** Ashutosh spent 2 years working at UR building prototype functional AO unit that was transported to LVPEI by September 2016. Ongoing visits to URMC planned by Ashutosh Ricchariya and team.

**Funding complete:** Dr. G. N. Rao (materials, shipping, travel, accommodation, faculty time support), David Williams (material, personnel), Peter Robinson (accommodation, administration), Dr. Steven Feldon (faculty support - Jesse Schallek).

**6. EXPLORING JOINT STEM CELL RESEARCH (dormant)**

**What:** Exploratory reciprocal visits in March 2014/15 focused on mice models of human genetic bases diseases such as types of glaucoma, infectious disease research, and stem cell collaboration.

**Who at UR:** Rick Libby, Rajeev Ramchandran and Ruchira Singh.

**Who at LVPEI:** Dr. Virender Sangwan.

**How:** Ruchira Singh PhD to mentor LVPEI Faculty on stem cell research methodology.

**Funding:** Steve Dewhurst supported initial exploratory trip. Additional support for 2-3 pilot projects ($50K each) is needed.

**B. SRI RAMACHANDRA UNIVERSITY (SRU) - CHENNAI**

**7. NICU NURSE TRAINING (ongoing)**

**What:** Needs Assessment and recommendations for neonatal nurse training at SRU were made at last visit; next visit will be to monitor progress and enhance nurse training.

**Who at UR:** Dr. Nirupama Laroia (Neonatology), Patrick Hopkins (Clinical Tutor SON).

**Who at SRU:** Dr. Binu Ninan (Head of Neonatology), Dr. S. Rajendiran (Secretary International Liaison Committee Administration).

**How:** First 1-week visit made April 2016.

**Funding:** UR time and costs paid by SRU.

**Next:** Visit planned 2018 depending on SRU.

**8. MEDICAL STUDENT EXCHANGE (commencing 2018)**

**What:** Two URMC Medical students for pediatric-neonatal clinical or research experience (June-July) in Chennai at SRU.

**Who at UR:** Adrienne Morgan (URMC), Dr. Nirupama Laroia has agreed to be Faculty champion.

**Who at SRU:** Dr. Binu Ninan, Dr. S. Rajendiran (Secretary International Liaison Committee Administration).

**How:** Initial info session each Jan followed by selection process by Feb.

**Funding:** Medical School Student funding ($3K/student cost anticipated).

**Next:** Initial info session will be Jan 2018 followed by selection process by Feb 2018 led by Adrienne Morgan.

**9. PLASTIC & CRANIOFACIAL SURGERY (ongoing)**

**What:** Faculty and Resident exchanges, mutual education and training.

**Who at UR:** Dr. Howard Langstein (Chief), Dr. Clinton Morrison (Director).

**Who at SRU:** Drs. Syed Altaf Hussain & Jyotsna Murthy (Faculty), Dr. S. Rajendiran (Sec. International Liaison Committee Admin)

**How:** Annual exchanges and short-term visits for resident (Dr. Mushin, Senior Resident for Feb 2017 visit).

**Funding:** India Community raised $20k and donated to UR Plastic Surgery Department.

**Next:** To be formalized as Attachment to the existing general MOU (via Peter Robinson/Diane Caselli).

**10. NEPHROLOGY RESEARCH AND LABORATORY TRAINING (dormant)**

**What:** Laboratory training at SRU on ‘Mechanism of Tolerance with Mixed Hematopoietic Stem Cell Transplant’.

**Who at UR:** Dr. Anirban Bose (Nephrology) is the sole initiator and lead of this program.

**Who at SRU:** Dr. S. Rajendiran (Secretary International Liaison Committee Administration)

**How:** MOU executed and Dr. Bose appointed Visiting Faculty at SRU.

**Funding:** Travel self-funded by Dr. Bose.

**C. POSTGRADUATE INSTITUTE OF MEDICAL EDUCATION AND RESEARCH (PGI) - CHANDIGARH**

**11. PLASTIC & CRANIOFACIAL SURGERY (ongoing)**

**What:** Faculty and resident exchanges, education and training.

**Who at UR:** Drs. Howard Langstein (Chief), Dr. Clinton Morrison (Director).

**Who at PGI:** Dr. Ramesh Sharma (Professor and Head, Department of Plastic Surgery).

**How:** Annual exchanges and short-term visits for resident (Dr. Mushin for Feb 2017 visit).

**Funding:** India Community raised $20k and donated to UR Plastic Surgery Department.

**Next:** To be formalized under new MOU (via Peter Robinson/Diane Caselli) based on response awaited from Dr. Sharma (PGI).

**D. CHRISTIAN MEDICAL COLLEGE-LUDHIANA (CMC)**

**12. PLASTIC & CRANIOFACIAL SURGERY (to be commenced)**

**What:** Introductory visit made Feb 2017 via potential ‘Prospects’ known to Dr. Langstein.

**Who at UR:** Dr. Howard Langstein (Chief), Dr. Clinton Morrison (Director).

**Who at CMC:** Dr. Abraham Thomas (Director, CMC-Ludhiana), Dr. Vijay Obed (Head of Department).

**How:** Annual exchanges and short-term visits for Residents planned.

**Funding:** India Community raised $20k and donated to UR Plastic Surgery Department.

**Next:** To be formalized under new MOU (via Peter Robinson/Diane Caselli), and further input from Dr. Abraham (CMC).

**E. SRI GANGA RAM HOSPITAL - DELHI**

**13. NEONATOLOGY STUDY (ongoing)**

**What:** Pediatric study on observational evaluation of neurotoxicity in late preterm/term infant severe jaundice).

**Who at UR:** Dr. Sanjiv Amin (Neonatology) is initiator and lead of the program. High level visit by URMC Leadership visit made 2012.

**How:** Dr. Amin appointed Visiting Faculty at Sir Ganga Ram, had NIH funding and plans to continue.

**Funding:** Future NIH funding anticipated by Dr. Amin.

**F. LECTURE SERIES ON INDIAN SUBCONTINENT**

**14. LECTURE SERIES ON INDIAN SUBCONTINENT - RIVER CAMPUS**

**What:** To generate and gauge interest and expertise on scholarship for a potential Center for studies related to India and the Indian subcontinent at UR.

**Who at UR:** Mantra Roy (Librarian Rush Rhees), Professors Llerena Searle and Sharon Willis, Rajeev Ramchandran.

**How:** Six lectures in 2016-2017 showcasing faculty and scholarly work related to India/Indian subcontinent. ‘Libguides’ (on-line web-based reference guides) pertaining to these lectures created by Mantra Roy.

**Funding:** Rush Rhees Library, Anthropology, Visual & Cultural Studies, Peter Robinson (India Initiative).