# Dr. Nicholas Ross

P.I. Dr. Nic Ross is a deep believer in delivering science-enabling products, including datasets, catalogs, analysis codes, plots, algorithms and where possible computational resources to the wide astronomical community. As such, the call for delivering science-enabling products by the release of the Cycle 2 Call for Proposals (September 2019) is fully inline with his scientific practice.

Ross has being developing and building up his GitHub Repositories over the last year or so, github.com/d80b2t and indeed now does all his analysis and paper writing on GitHub. Ross will devote a considerable amount of his personal research time (and due to his STFC ERF has 100% FTE for research) to leading the developement and timely production of the ERS ERQ science-enabling products.

# Dr. David Rosario

Co-PI Dr. David Rosario is a postdoctoral research associate at Durham University, with expertise in mid- and far-IR studies of high-redshift AGN, including star-formation, outflows, molecular gas and torus properties.

#### Prof. David Alexander

Prof. Alexander is an expert in high-z obsured AGN. He will use his considerable *Spitzer IRS* experience to help test our MIRI MRS data-analysis toolkit.

# Dr. Rachael Alexandroff

Dr. Alexandroff is an leading expert on the ERQ population. She will bring to bear her now considerable and recent data analysis (long-slit optical, polarimerty, radio) data analysis experience to build our MIRI MRS data-analysis toolkit.

# Dr. Manda Banerji

Dr. Banerji is a Royal Society University Research Fellow and has extensive experience in studying populations of obscured, infrared luminous quasars as well as high-redshift quasars. She has successfully applied for multi-wavelength follow-up time for these populations on facilities such as XMM-Newton, VLT, JCMT, ALMA and VLA.

# Prof. Niel Brandt

# Prof. Xiaohui Fan

Prof. Fan is a leader in surveys of high-redshift quasars and reionization. He has extensive experience in studying quasars and their host galaxies with *HST* and *Spitzer*.

### Prof. Fred Hamann

Prof. Hamann was a lead part of the team that discovered and then fully characterized the Extremely Red Population. He is the P.I. of the ALMA Cycle 5 ERQ study.

#### Prof. Dale Kocevski

Prof. Kocevski is an expert in AGN-host galaxy studies and was one of the leading members of the CANDELS team. His supervision of a postdoc will be of major benefit to obtaining our Science and SEP goals.

# Dr. Stephanie LaMassa

Dr. LaMassa is currently at the STScI and is already involved with the documentation efforts there. As such, Dr. LaMassa will help with those efforts, along with writing code and potentially leading follow-up where approriate. She will also be a natural link to the direct efforts of the Space Telsecop Science Institute.

# Prof. Andy Lawrence

Prof. Lawrence is the Regius Professor of Astronomy at the University of Edinburgh. He has long history of research on Active Galaxies at X-ray, optical, and IR wavelengths, as well as observational cosmology and ultra-luminous IR galaxies. He is the PI of the UKIDSS survey, has extensive experience in managing astronomical software delivery in wide field astronomy, and was one of the originators of the International Virtual Observatory Alliance.

# Dr. Chelsea MacLeod

Dr. MacLeod has extensive experience analysing the time variability of quasars and a strong foundation for working with survey data. Using SDSS data, Dr. MacLeod characterized the optical variability of quasars in a sample many times larger than ever previously attempted. By including Pan-STARRS data for SDSS quasars, she compiled a sample of extremely

variable quasars and is leading a spectroscopic followup campaign in order to analyse their spectroscopic variability.

Starting in April 2016 she has worked within the SDSS-IV collaboration as part of the Time Domain Spectroscopic Survey (TDSS), a subprogram of eBOSS that is obtaining optical spectra of time variable sources. Dr. MacLeod is currently leading the TDSS quasar target selection and is a co-chair of the Quasar Science Working Group of SDSS-IV eBOSS. Dr. MacLeod will draw from her experience in the optical to assist in the observational followup of quasars in the IR.

# Dr. James Mullaney

Dr. Mullaney has extensive experience in the analysis and interpretation of infrared observations of AGNs both in the local and high redshift Universe. The infrared SED templates and fitting code he developed have become a standard for analysing the infrared emission of AGNs and will be used extensively during this project.

## Prof. Adam Myers

Prof. Myers is an expert on the statistical analysis of reddened, obscured and optically luminous quasars. He has co-authored many well-cited publications on targeting quasars, quasar clustering, high-redshift and unusual quasars, and quasars in the time domain. Prof. Myers has made follow-up observations of quasars, and other objects, at telescopes on five continents. His work has been funded multiple times by the NSF and NASA, including via space telescope programs such as those for *Chandra* and *Spitzer*. He has served on time allocation committees for GALEX and the *HST*.

Prof. Myers has also worked extensively in large survey collaborations, often in formal management roles. He is an Architect of SDSS-III and SDSS-IV, was the quasar target selection lead for the SDSS-IV/eBOSS survey, is the Level 3 Target Selection Manager for the Dark Energy Spectroscopic Instrument (DESI) and is the documentation and website lead for the Legacy Surveys (http://legacysurvey.org). Prof. Myers is a strong advocate for transparent and reproducible science. For example, as part of his work on DESI, he has contributed over 10,000 lines of code to publicly visible github repositories.

### Dr. Jessie Runnoe

Dr. Runnoe is an expert on quasar central engines at radio through X-ray wavelengths. Drawing on her vast observational experience, she will contribute to the development of the MIRI MRS data-analysis toolkit and

assist with follow-up observations of the ERQ core sample. She will be part of the Core Coding and Observational Follow-up groups.

# Prof. Don Schneider

Prof. Donald Schneider has been involved with the Sloan Digital Sky Survey since its earliest design stages in the 1980s and has considerable experience in preparing large datasets for community use, via leading several editions of the SDSS Quasar Catalogs and participating in the annual public Data Releases. Prof. Schneider will be on the follow-up Observational team, obtaining time on the HET if necessary.

#### Dr. John Stott

Dr John Stott is an expert in resolved NIR observations as a key researcher in the KROSS VLT KMOS IFU survey of 800  $z \gtrsim 1$  star-forming galaxies. He will use this expertise to explore and analyse any spatially resolved spectral components of the MRS IFU spectra. The goal is to spatially isolate regions of the galaxy to hunt for those dominated by star formation or AGN.

#### **Prof. Michael Strauss**

Michael Strauss is an expert in the demographics and physics of AGN, and will work to put the results from these observations into the broader context of AGN feedback and evolutionary models.

# Dr. Renske Smit

Dr. Smit is expert on IFU spectroscopy, both on *HST* and the VLT, and will be contributing to the data analysis.