

**OTHER SUPPORT****Watkins, Simon C****ACTIVE**

P50 GM082251 (PI: Gronenborn)	09/01/12-07/31/17	0.40 calendar
NIH	\$80,348	
<i>University of Pittsburgh Center for HIV Protein interactions (PCHPI)</i>		

The central aim of this core is to provide optical imaging services for the Center which is focused to understanding the molecular processes involved in HIV entry into cells

P30 CA047904 (PI: Davidson)	08/01/15 - 07/31/20	1.20 calendar
NIH	\$83,486	
<i>Cancer Center Support</i>		

The Center, which forms the Cell and Tissue imaging core within this proposal performs microscopic analyses services for members of the UPCI research community, from the traditional to the cutting edge using a full complement of microscope technologies.

P30 DK072506 (PI: Frizzell)	08/01/10-05/31/18	0.6 calendar
NIH	\$83,805	
<i>Basic and Clinical Studies of Cystic Fibrosis – Core C</i>		

The central aim of this core is to provide optical imaging services for the pulmonary airways and the lung.

R8883-CR07 (PI: Frizzell)	07/01/11-06/30/19	0.24 Calendar
CFF	\$40,000	
<i>Research Development Program in CF – Imaging Core</i>		

The overall goal of this project is to elucidate the mechanisms underlying Cystic Fibrosis and to discover methods for reversing the defects in the disease.

R01 NS076511 (PI: Bayir/Kagan)	07/01/12-06/30/17	0.24 calendar
NIH	\$11,289	
<i>Mapping Lipid Oxidation in Traumatic Brain Injury by Mass Spectrometric Imaging</i>		

Dr. Watkins will provide access, training and assistance in the use of advanced imaging techniques in particular to develop large area multi-dimensional imaging of brain

R01 CA169118-01 (PI: Storkus)	07/01/12-06/30/17	0.60 calendar
NIH	\$19,833	
<i>Combinational Immunotherapy Targeting the Melanoma-Associated Vasculature</i>		

Dr. Watkins will provide access, training and assistance in the use of advanced imaging techniques to study immunotherapy for melanoma, principally using quantitative confocal microscopy

P01 AG043376 (PI: Robbins)	07/15/13-04/30/18	0.60 calendar
NIH	\$138,276	
<i>Cell Autonomous and Non-Autonomous Mechanism of Aging (Core C)</i>		

The central aim of this core is to provide optical imaging services for the Center which is focused to understanding the molecular processes involved in aging

1R01 AJ103022 (PI: Kane)	06/01/13-05/30/18	0.60 calendar
NIH	\$11,070	
<i>Biochemical and Spatial Regulation of IKKg/Nemo During T Cell Activation</i>		

Dr. Watkins will provide access, training and assistance in the use of advanced imaging techniques to study Nemo in T-Cell activation. Specifically using TIRF and confocal methods

1 R01 EB 017268 (PI: Bruchez)	07/01/13-06/30/18	0.60 calendar
NIH	\$26,070	
Tandem Chemical Sensors for endothelial Cell Biology		

Dr. Watkins will provide access, training and assistance in the use of advanced imaging techniques to aid in the development of novel FAP based probe technologies

1R01 HD075760 (PI: Manole)	09/01/13-05/31/18	0.12 calendar
NIH	\$9,943	

CYP 450-mediated CBF Dysregulation and Neurotoxicity in Pediatric Cardiac Arrest

Dr. Watkins will provide access, training and assistance in the use of advanced imaging techniques to study brain function, principal activities are in vivo multiphoton experiment design and quantitation

P30 DK079307 (PI: Apodaca/Kleyman)	08/01/13-07/31/18	0.12 calendar
NIH	\$15,000	

Pittsburgh Center for Kidney Research Core C

The central aim of this core is to provide optical imaging services for the Center which is focused to understanding the molecular processes involved kidney disease. The core function within the CBI is specifically directed to advanced imaging methods (high speed approaches, super-resolution methods etc)

P01 HL114453. (PI: Mallampalli)	01/01/14-12/31/18	0.60 calendar
NIH	\$125,225	

Cardiolipin as a Novel Mediator of Acute Lung Injury

The central aim of this core is to provide optical imaging services for the Center which is focused to understanding the molecular processes involved in the biology of cardiolipin

1R01CA185363-01 (PI: Liu)	05/01/14-04/30/18	0.12 calendar
NIH	\$10,021	

*PQC2 Alteration of 3D nuclear organization at Nanoscale in Breast Tumorigenesis*

Dr. Watkins will provide access, training and assistance in the use of advanced imaging techniques in particular super-resolution methods (STORM, PALM, SIM)

2R01NS062019 (PI: Cui)	07/01/14-06/30/19	.12 calendar
NIH	\$10,000	

Biomimetic surface for neural implants

Dr. Watkins will provide access, training and assistance in the use of advanced imaging techniques in particular to define the local biology of intracrainial and intra cerebral implants

NR21 DE024527 (PI: Kim)	07/01/14-06/30/16	0.12 Calendar
NIH	\$5,000	

*Mechanisms of perineural invasion in head and neck cancer*

Dr. Watkins will provide access, training and assistance in the use of advanced imaging techniques in head and neck cancer

R21 INS088167 (PI: Modo)	03/01/15-02/28/17	0.12 Calendar
NIH	\$3,453	

*Mesoscale MR Imaging of Cellular connectivity in the ex vivo human hippocampus*

Dr. Watkins will provide access, training and assistance in the use of advanced imaging techniques in particular for brain imaging including tissue clearing and multiphoton imaging

R21 ES025606 (PI: Van Houten/Opresko) NIH <i>ROS driven mitochondrial-telomere dysfunction during environmental stress</i>	04/01/15-03/31/21 \$8,914	0.12 Calendar
Dr. Watkins will provide access, training and assistance in the use of advanced imaging techniques in particular using FAPS and super-resolution approaches (SIM/STED)		
HDTRA1-11-16-BRCWMD- (PI: Ryman) DTRA	06/14/15-06/13/20 \$50,000	0.60 calendar
Predictive understanding of the effects of encephalitic virus exposure on the blood brain barrier. The central aim of this core is to provide optical imaging services for the Center which is focused to understanding the molecular processes involved in viral infection of the brain		
1R01AI114587-01A1 (PI: Rothstein) NIH	07/01/15-12/31/19 \$11,180	0.60 calendar
In Vivo Detection and Mechanisms of Regulatory B Cell Function In transplantation Dr. Watkins will provide access, training and assistance in the use of advanced imaging techniques to study B cell involvement in transplantation models		
R01 HL128297 (PI: Sundd) NIH	08/15/15-05/31/20 \$24,472	0.24 calendar
Pulmonary Arteriole Occlusion by Platelet Neutrophil Micro Emboll in acute chest syndrome Dr. Watkins will provide access, training and assistance in the use of advanced imaging techniques to study platelet and neutrophil trafficking in the Lung		
U19 AI068021-11 (PI: Greenberger) NIH-	09/01/15-08/31/20 \$147,810	0.6 Calendar
<i>Mechanims-Directed Sequential Delivery of Radiation Mitigators, Imaging Radiation Pathology Core.</i> The central aim of this core is to provide optical imaging services for the Center which is focused to understanding the molecular processes involved in radiation induced pathology and therapy		
1R01NS089688 (PI: Cui) NIH	07/01/15-06/30/20 \$10,000	0.12 calendar
Inhibition of Neural Electrode-Mediated Inflammation and Neuronal Cell Death Dr. Watkins will provide access, training and assistance in the use of advanced imaging techniques in particular to define the local biology of intracrainial and intra cerebral implants		
R01 ES019566 (PI: Van Houten) NIH	1/01/16-12/31/20 \$8,864	0.24 Calendar
<i>DNA damage recognition by nucleotide excision repair proteins</i> Dr. Watkins will provide access, training and assistance in the use of advanced imaging techniques in particular to define the repair of damaged DNA using oblique illumination methods.		
R01 HL130191 (PI: Morelli) NIH	02/08/16-01/31/20 \$17,707	0.60 calendar
Exosomes as paracrine signal mediators in cardiac allograft rejection Dr. Watkins will provide essential light and electron microscopy imaging of exosomes in isolation or in the context of cells and tissues as needed		
S10 OD021540 (PI: Watkins) NIH	03/15/16-03/14/17 \$1,239,503	0.00 calendar
Request for a Leica 3X STED Microscope		

1R21 AI121981-01 (PI: Turnquist) NIH Countering the pro-inflammatory attributes of IL-33 during hematopoietic cell transplantation for tolerance Induction Dr. Watkins will provide access, training and assistance in the use of advanced imaging techniques in particular for tracking cells along cytokine gradients using live cell microscopy	04/01/16-03/31/17 \$7,552	0.12 calendar
R56 AI118908 (PI: Vignali) NIH Structural Analysis of the TCR-CD3 Complex and TCR Signaling	05/01/16-04/30/17 \$15,049	0.12 calendar
RSG-16-050 (PI: Shair) AMS Epstein-Barr virus Oncogenesis in nasopharyngeal Carcinoma	07/01/16-06/30/19 \$10,047	0.12 calendar
R01CA207209 (PI: O'Sullivan ) NIH Inhibition of ALT pathway by interfering with Poly-ADP-Ribose metabolism	07/01/16 - 06/30/21 \$15,062	0.30 Calendar
<b>PENDING</b>		
To be assigned (PI: Neal) JIT Requested NIH Mechanistic elucidation and Targeted Therapy of Platelet dysfunction after Trauma	07/01/16 - 03/31/21 \$11,255	0.60 Calendar
R01 To be assigned (PI: Binder) NIH HSP90 and immune responses to cancer	07/01/16 - 06/30/21 \$11,255	0.6 Calendar
R35 to be assigned (PI: Chu) NIH- Mechanistic convergence and neuroprotection in familial parkinsonism	07/01/16-06/30/21 \$22,509	1.2 calendar
To be assigned (PI: Basse) NIH It takes two: survival of effector cells at tumor sites is essential for the success of treatments to block immunosuppression	07/01/16-06/30/21 \$11,255	0.6 calendar
R01 (PI: Roman) NIH BMP10 in cardiovascular development and hereditary hemorrhagic telangiectasia	07/01/16-06/30/20 \$9,969	0.12 calendar
R21 (PI: Per Basse) NIH Poor effector cell survival at tumor sites: an immunosuppression-independent obstacle to the success of cell-based cancer immunotherapy.	07/01/16-06/30/18 \$6,753	0.36 calendar
R01 (PI: Roy) NIH Cytoskeleton-centric strategy to inhibit angiogenesis	07/01/16-06/30/21 \$11,753	0.36 calendar
R01 (PI: Robertson) JIT Requested NIH Improving cerebral aneurysm risk assessment through understanding wall vulnerability and failure models	09/01/16-08/31/21 35,000	0.12 calendar

R01 (PI: Melikin/EmoryUniversity) NIH Viral Inhibition by Interferon-Induced Proteins	09/01/16-08/31/21 \$75,000	0.60 calendar
R01 (PI: Xing) NIH Landscape and Dynamics of Cell Phenotypic Conversions	09/01/16-08/31/21 \$39,568	0.60 calendar
R01 (PI: Chalasani) JIT Requested NIH B Cells in pathogenesis of allograft rejection	09/01/16-8/31/21 \$6,875	0.36 calendar
R21 (PI: Xing) NIH A unified imaging platform for quantifying differential response and decisive cell fate decision	09/01/16-8/31/21 \$17,592	.012 calendar
P01 CA197238 (PI: Kalinski) JIT Requested NIH Reprogramming the Chemokine System in Cancer Immunotherapy – Core B	12/01/16-11/30/21 \$88,396	1.20 calendar
R01 CA203951 (PI: Binder) NIH Role of CD91 in Immune Response	12/01/16 - 11/30/21 \$11,458	0.6 Calendar
U18 (PI: Horn) NIH Closed-loop Neuroelectric Control of Emesis and Gastric Motility	09/01/16 - 08/31/18 \$5,729	0.6 Calendar
R21 (PI: Thirumala) NIH Validating an Experimental Perioperative Spinal Cord Injury Model	11/01/16 – 10/31/19 \$11,458	0.60 Calendar
OT2 (PI: Horn) NIH Functional Mapping of Gastric Vagal Signaling for Emesis	12/01/16 - 11/31/18 \$13,458	0.6 Calendar
R01 (PI: Kershaw) NIH Impact of CREBRF and its obesity-Risk Variant (p.Arg457Gin) on Cellular and Organismal Energy Homeostasis using Cell and Animal Models	04/01/17 - 03/31/22 \$14,999	0.12 Calendar
R01 (PI: Beniash) NIH Role of Keratin 75 in Enamel	04/01/17 - 03/31/22 \$10,000	0.12 Calendar
R01 (PI: Tsung) NIH Surgery Triggered Immune Response and Liver Metastases	04/01/17 - 03/31/22 \$11,458	0.6 Calendar
R01 (PI: Roy) NIH Role of MKL in Angiogenesis	04/01/17 - 03/31/22 \$12,875	0.36 Calendar

R01A1125297 (PI: D'Cruz) NIH The Function of MFSD2A in the Effector T Cell Immune Response	04/01/17 - 03/31/22 \$5,729	0.36 Calendar
R01 (PI: Barak) NIH The Placental Phenome Initiative	04/01/17 - 03/31/22 \$10,000	0.12 Calendar
R01 (PI: Hartman) NIH Mechanisms of HMGB1 Release from Ischemic Muscle in Peripheral Arterial Disease	04/01/17 - 03/31/22 \$12,239	0.30 Calendar
R01 (PI: Xing) NIH Cooperation Between Microenvironmental Factors to Induce Partial Epithelial-to-Mesenchymal Transition and Tumor Migration.	04/01/18 - 03/31/19 \$13,301	0.12 Calendar

**OVERLAP:**

**With regard to this application, there are no overlaps in research projects. If Dr. Watkin's effort on funded applications reaches 100% effort on program grants will be reduced by 0.1 months sequentially and effort delegated to the associate directors of the CBI. In these proposals his effort is primarily administrative such that small reductions will not impact the utility of the core to the user group.**