

## Schedule of Fees

PANEL*	Est Price# /sample	Description
Mouse T-cell	\$6.00	IL-2, IL-4, IL-10, TNF- $\alpha$ , IFN- $\gamma$
Mouse Treg	\$9.00	IL-2, IL-4, IL-10, TNF- $\alpha$ , IFN- $\gamma$ , TGF- $\beta$
Custom T-cell*	\$4.00	IL-5, IL-13, IL-17
Mouse Innate I	\$7.00	IL-1 $\beta$ , IL-6, IL-10, IL-12 (p70), KC, TNF- $\alpha$
Mouse Innate II*	\$4.00	KC, RANTES, MCP-1
Mouse/Human TGF- $\beta$	\$3.00	TGF- $\beta$ 1,2 & 3
Human T-cell*	\$6.00	IL-2, IL-4, TNF- $\alpha$ , IFN- $\gamma$ , GM-CSF
Human Innate I	\$6.00	IL-1 $\beta$ , IL-6, IL-8, IL-10, IL-12 (p70) TNF- $\alpha$
Human Innate II*	\$6.00	IL-8, RANTES, MIP-1 $\alpha$ , MCP-1

#Prices are effective for all Center members for work received on or after June 1, 2004 and reflect Member discount.

\*For other customized combinations, call for pricing

**25%+**

**Discount  
for All DHRC  
Members!**

## About the ImmunoCore

### Personnel:

Dr. Peter Ernst – Core Director  
William Ross – Co-Director  
Elizabeth Wiznerowicz – Laboratory Manager

### Contact Information:

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### Web Site:

[http://www.healthsystem.virginia.edu/internet/digestive-health/dhrc/immunol\\_info.cfm](http://www.healthsystem.virginia.edu/internet/digestive-health/dhrc/immunol_info.cfm)

### Equipment includes:

BD FACS Calibur flow cytometer in Rm. 1112, Building MR4

BD FACS Vantage for cell sorting and other flow cytometry in University FACS core in Jordan Hall

Data Analysis hardware and software Rm. 1112, Building MR-4

## Immunology/ Cell Isolation Core

### CYTOKINE ASSAYS

- Detect multiple analytes in a single well
- Assay sensitivity 2-5000 pg/mL
- Reagents available on-site
- Standard labor and data analysis included

### Location:

Rm. 1035 in MR4 Bldg. of the UVA Medical Center Complex.

### Hours of Operation:

Mon.-Fri. 8AM to 4PM

\*The ImmunoCore will follow the UVA standard for Holidays

## Detection Systems

- ⌘ Mouse/Human T-cell
- ⌘ Mouse/Human Innate Cell Panel I
- ⌘ Mouse/Human Innate Cell Panel II
- ⌘ Mouse TGF- $\beta$
- ⌘ Mouse T-reg
- ⌘ Mouse/Human TGF- $\beta$

We can customize any panel to fit your specific needs.

Cytokine	Human	Mouse
IL-1 $\alpha$	◆	◆
IL-1 $\beta$	◆	◆
IL-2	◆	◆
IL-3	◆	◆
IL-4	◆	◆
IL-5	◆	◆
IL-6	◆	◆
IL-7	◆	◆
IL-8	◆	◆
IL-10	◆	◆
IL-12 (p40)	◆	◆
IL-12 (p70)	◆	◆
IL-13	◆	◆
IL-15	◆	◆
IL-17	◆	◆
IFN- $\gamma$	◆	◆
TNF- $\alpha$	◆	◆
KC	◆	◆
RANTES	◆	◆
MIP1 $\alpha$	◆	◆
MCP-1	◆	◆

\*This core is approved for both animal and human tissue samples.

## General Information

### Consultation:

Prior to your first submission of samples, you *must* schedule a consultation with the Director or with the tech. This consultation will aid in the efficient utilization of Core resources and optimize experimental results.

### How specimens should be prepared:

*Cell culture supernatants:* Collect supernatants in aliquots. Spin down any cells in supernatant. Freeze at -70C and store until day of assay. On your scheduled assay day, thaw samples and dilute in appropriate media. You will need 60 uL of sample per replicate. Deliver samples on ice to technician. Special preparations are required for TGF- $\beta$  assays.

*Serum samples:* Collect serum in aliquots and store at -70C until day of assay. You will need 60 uL of sample per replicate. Do not dilute, as this will be done for you if requested. On day of assay deliver samples on ice to technician.

*Tissue samples:* Collect tissue and place in 2-5 mL cold PBS containing proteinase inhibitors. Homogenize samples (<10 sec) and sonicate (<10 sec). Centrifuge at 4C at >10,000g for 10 min. Remove supernatant and filter through a .45 um syringe filter. Perform protein determination on all samples (Bradford, BCA) and dilute all samples to 400 ug/mL total protein. Store at -70C and deliver to technician on ice on day of assay.

Examples of work can also be found in the following publications:

Bamias, G., C. Martin III, M. Marini, S. Hoang, M. Mishina, W. Ross, M. Sachedina, C. Friel, J. Mize, S. Bickston, T. Pizarro, P. Wei, and F. Cominelli. 2003. Expression, localization, and functional activity of TL1A, a novel Th1-polarizing cytokine in inflammatory bowel disease. *J. Immunol.* 171: 4868-4874.

Ryan, K.A., Smith, M.F. Jr., Sanders, M.K. and Ernst, P.B. Reactive oxygen and nitrogen species differentially regulate TLR4-mediated activation of NF- $\kappa$ B and IL-8 induction. *Infect. Immun.* 72:2123-2130, 2004.

Olson, T.S., Bamias, G., Naganuma, M., Rivera-Nieves, J., Burcin, T.L., Ross, W., Pizarro, T.T., Ernst, P.B., Cominelli, F. and Ley, K. Expanded B cell population blocks regulatory T cells and exacerbates ileitis in a murine model of Crohn disease. *J. Clin. Invest.* 114:389-398, 2004.

Denning, T.L., Qi, H., König, R., Scott, K.G., Naganuma, M. and Ernst, P.B. CD4+ Th cells resembling regulatory T cells that inhibit chronic colitis differentiate in the absence of interactions of interactions between CD4 and class II MHC. *J. Immunol.* 171:2279-2286, 2003