

# Scientific/Medical Advisory Committee (SMAC)

**Dr. Greg Everson**

University of Colorado

**Dr. Richard Green**

Northwestern University Feinberg School of Medicine

**Dr. Aubrey Goldstein**

Bruyere Continuing Care, Canada

**Dr. Dennis Black**

University of Tennessee Health Science Center

**Dr. Denise Harnois**

Mayo Clinic, Florida

**Dr. Kapil Chopra**

University of Pittsburgh Medical Center

**Dr. Chris Bowlus**

UC Davis Medical Center

**Dr. Keith Lindor**

Mayo Clinic, Minnesota

**Dr. Johannes Hov**

NoPSC, Norway

**Dr. Stephen Miller**

Private medical practice, La Jolla, CA

**Dr. Steven Deitch**

Doctor to Doctor Sales Solutions

**Dr. Don Safer**

University of Colorado

**Dr. Gideon Hirschfield**

Toronto Western Hospital, Toronto, Canada

**Dr. David Rhodes (Chair)**

Purdue University



# Scientific/Medical Advisory Committee (SMAC) Mission

- Implement and facilitate practical research and development (R&D) towards a cure
- Enable optimal clinical practice
- Increase education, awareness and advocacy
- Opinion leading ‘voice’ for PSC



# Research Grants Program

- Researchers submit grant applications in promising and significant areas
- Grant proposals limited to \$40,000 over two years
- Proposals are reviewed and ranked by the scientific/medical advisory committee (SMAC)
- With guidance from the SMAC, PSC Partners Seeking a Cure has invested > \$500,000 in PSC research!



# Summary of Awards

- \$40,000 to STOPSC (2007-2008) **[Clinical Trial]** → **\$0.6 M grant**
- Since 2009, 13 research proposals funded:

- 2009 {
  - Konstantinos N. Lazaridis (Mayo Clinic) \*\* → **\$3.5 M grant**
  - Pietro Invernizzi (UC Davis)
  - Cyriel Y. Ponsioen (Amsterdam, The Netherlands)
  - Christopher Bowlus (UC Davis)
  - Gregory T. Everson (University of Colorado)
  - Richard M. Green (Northwestern) \*
  - Keith D. Lindor (Mayo Clinic) **[Clinical Trial]**
  - Gideon Hirschfield (University of Toronto, Canada)
- 2010 {
  - Mario Strazzabosco (Yale) and Michael Trauner (Austria)
  - Carlo Selmi (UC Davis)
  - Judy Cho (Yale)
  - Shi-Ying Cai and James L. Boyer (Yale)
  - Sridhar Mani (Albert Einstein College of Medicine)

\* **Publications acknowledging PSC Partners**



# SMAC Tasks for 2011/2012

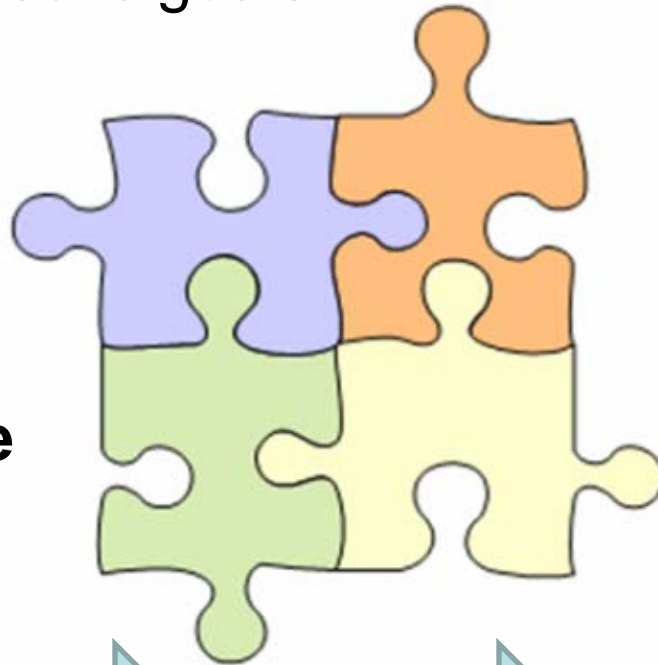
- Review successes/limitations of present grant program
- Consider increasing grant awards from \$40,000 to \$100,000
- Consider funding fewer proposals in high priority areas, while maintaining balance between, near-term, intermediate and long-term therapeutic goals

**1. Immunology**

**3. Toxic bile**

**2. Nuclear receptors**

**4. Gut flora and gut permeability**



**Therapeutic Goals**

**Near-term**

**Intermediate**

**Long-term**



# Therapeutic Goals

## Immediate and near-term (1-3 years)

- Reduce impact of cholestasis
  - Symptoms, e.g., pruritis
  - Signs, e.g., elevated enzymes, fibrosis
- ❖ Optimize utility of currently available drugs and supplements ('cocktail concept'), e.g., urso, cholestyramine, rifampicin, vancomycin, DHA, fibrates, antioxidants. vitamin D

# Therapeutic Goals

## Intermediate term (3-6 years)

- Reduce immune/inflammatory damage
- Identify and disrupt key pathways
- Reduce incidence of liver failure
- Convert to benign, chronic illness

❖ Ongoing and planned research, e.g., bile acid analogs, T-cell modulators

# Therapeutic Goals

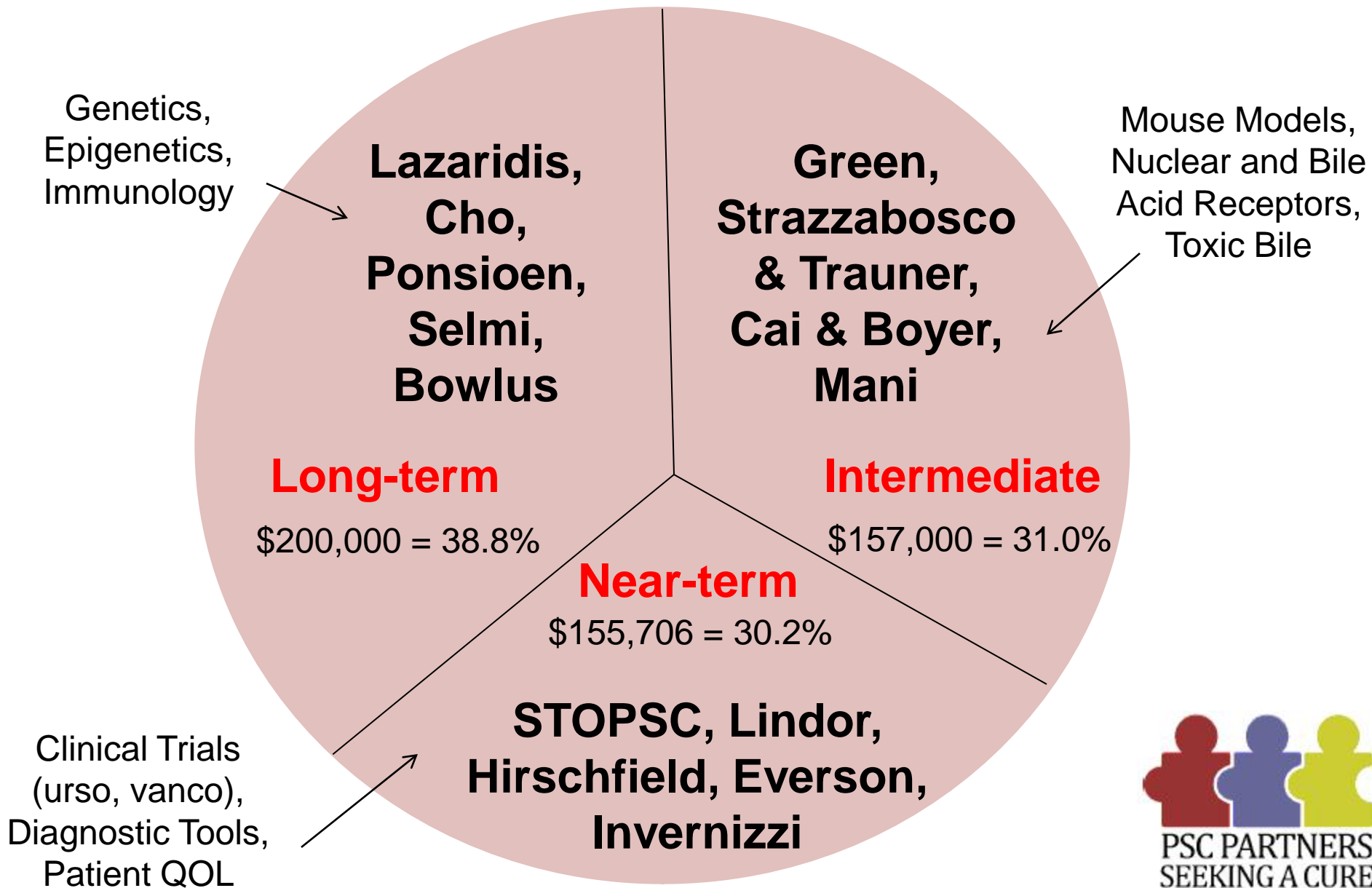
## Long term (6-10 years)

- Silence disease mechanism
- Identify and define structure and function of source, likely genetic complex
- Arrest progression of illness
- Enable normal lifespan with good quality of life ('Cure')

❖ Early research underway, e.g., susceptibility haplotypes, memory cell formation



# Research Funded To Date: Distribution Between Near-Term, Intermediate, and Long-Term Goals



# Clinical Issues

- **Improve medical practice for rare disease**
  - Guideline understanding and adherence
  - Symptom control
  - Clarified role of urso
  - Transplantation issues
  - Integrated and holistic care
- ❖ **Significant degree of inconsistency needs remedy**

# Patient and Caregiver Empowerment

- Increased knowledge=increased control and better care
- Decrease burden of 'Business Of Being Sick'
  - Insurance issues
  - Disability issues
  - Resource issues, etc.
- ❖ Be your own best advocate!