Exploring research on religion, spirituality and health

This newsletter provides updates on research, news and events related to spirituality and health, including educational resources and funding opportunities. Please forward to colleagues or students who might benefit. Our goal is to create a community of researchers, clinicians, clergy, and laypersons interested in spirituality and health and keep them informed and updated. An EVENTS CALENDAR concludes the newsletter and describes spirituality and health related presentations happening at Duke and around the world. This is your newsletter and we depend on you to let us know about research, news, or events in this area.

All e-newsletters are archived on our website. To view previous editions (July 2007 through January 2014) go to: http://www.spiritualityandhealth.duke.edu/publications/crossroads.html

LATEST RESEARCH OUTSIDE DUKE

Headache and Religious Attendance in Norway
In this study, Norwegian researchers examined the relationship between headache (HA) and religious attendance in a population-based sample of 24,610 adults ages 20 or older who were prospectively followed for 11 years (The Nord-Trondelag Health Survey). Religious attendance was measured by a single question with possible responses being “never” (37.0%), less than once/month (48.4%), 1-3 times/month (10.9%), and more than 3 times/month (3.7%). Religious attendance was defined as “frequent” if participants attended at least 1-3 times/month. HA was assessed with a single question that asked “Have you suffered from HA during the last 12 months?” (yes or no). Chronicity of HA in terms of days experienced per month and migrainous vs. non-migrainous nature of the HA were also determined. The survey methodology was quite complex and difficult to decipher; however, religious attendance was measured in 2006-2008, and HA status was measured in 1995-1997. Thus, baseline HA status in 1995-1997 was used to predict frequency of religious attendance 11 years later. Results: Participants who had more frequent HAs and who had migraine HAs were significantly more likely to attend religious services 11 years later. Those who experienced HA for 7-14 days/month in 1995-1997 were 30% more likely to attend religious services frequently in 2006-2008 compared to those with no HA (OR=1.30, 95% CI 1.12-1.52). Those who had migrainous HA’s for 7-14 days/month in 1995-1997 were 48% more likely to attend religious services frequently compared to those with no headache (OR=1.48, 95% CI 1.19-1.83). Furthermore, a gradient of effect was present such that the more frequent migrainous HA was experienced, the more likely the participant attended religious services a decade later. These relationships were found to be present in both men and women. Interestingly, HA status in 1995-1997 did not predict frequency of attending concerts, the cinema, or theatre. Thus, the presence of HA pain uniquely predicted an increase in frequency of religious attendance. Researchers concluded that religious activity may be used as a coping strategy for people who experience severe chronic HAs, citing other research with similar findings. Citation: Tronvik E, Sorensen T, Linde M, Bendtsen L, Artto V, Laurell K, Kallela M, Zwart JA, Hagen K (2014). The relationship between headache and religious attendance (the Nord-Trondelag health study – HUNT). Journal of Headache and Pain 15:1

Comment: This is one of the largest studies examining the directionality of the relationship between pain/suffering and religious activities. The results suggest that greater pain/suffering precedes an increase in religious activity, not vice-versa (although they did not test the vice-versa hypothesis). Although this finding may be obvious to some, there has been great debate in the research world on how to interpret positive findings between religious involvement and worse health (especially in largely secular European countries, where this is often found). Does religious involvement lead to worse health or does worse health lead to greater religious activity? The religious coping hypothesis would suggest the latter (as the authors of this paper argue).

Fibromyalgia and Spiritual Needs in Germany
Researchers at academic institutions in Munich, Germany, collaborating with researchers at the Samueli Institute and Luther College in the U.S., surveyed a convenience sample of 300 patients treated in a multidisciplinary rehabilitation program in the department of physical medicine and rehabilitation at the University Hospital of Munich between 2004 and 2008. A total of 141 participants (47%) returned useable questionnaires. All participants fulfilled standard criteria for fibromyalgia. The study’s purpose was to determine the prevalence of spiritual needs in this population (95% women, average age 58, average duration of illness 14 years, 76% without a high school education, and 73% Christian). Spiritual needs were assessed using a 30-item questionnaire with four major components: religious needs (praying, participating in religious services, reading religious materials, turning to God), existential needs (relating to the meaning of life/suffering/death), need for inner peace (psychological needs), and needs related to giving/generativity (providing solace to others). Results indicated that only 18% of the sample said they were both religious and spiritual, and 39% said they were neither. Religious needs were present in 18-58% of respondents, existential needs in 32-60%, inner peace needs in 62-88%, and giving/generativity needs in 69-79%. Religious needs, the least common type of spiritual need, were most prevalent among those indicating they were both religious and spiritual (not surprising). Bivariate analyses indicated that religious needs were strongly related to both existential needs and giving/generativity needs, but were unrelated to indicators of fibromyalgia impairment, tender point count, depression, anxiety, life satisfaction, or quality of life. Multivariate analyses revealed that greater religious needs were positively related to both greater life satisfaction (B=+0.27, p=0.01) and greater impairment from fibromyalgia (B=+0.37, p=0.001). Citation: Offenbaecher M, Khols N, Toussaint LL, Sigi C, Winkelmann A, Hieblinger R, Walther A, Bussing A (2013). Spiritual needs in patients suffering from fibromyalgia. Evidence-Based Complementary and Alternative Medicine. 2013, article ID 178547
Comment: Consistent with other studies from northern and middle Europe, religious needs were relatively infrequent and were more prominent among those experiencing the most severe symptoms of fibromyalgia. Again, those suffering from greater physical illness are the ones who are most religious. As the writer Oswald Chambers said nearly a century ago, “Troubles nearly always make us look to God; His blessings are apt to make us look elsewhere.”

“God control” and Health Behaviors
Researchers from Nipissing University in Ontario, Canada, surveyed 549 individuals from 21 major U.S. cities over the Internet via Craigslist advertisements (average age of respondents 36.9 years). The intention was to determine how belief that God was in control of health is associated with health-related attitudes or behaviors. Health locus-of-control was measured by a standard scale (18-item Multi-dimensional Health Locus of Control Scale), which produces three subscale scores: “internal” locus of control, “chance” locus of control, and “powerful others” locus of control. The 6-item God Health Locus of Control scale was also administered, along with a question about importance of religion. Perceived susceptibility to chronic disease, perceived risks of poor health behaviors, physical activity, tobacco use, fruit/vegetable intake, and alcohol consumption were health attitudes/behaviors measured. Results indicated that God Locus of Health Control was related to less physical activity (-.10, p<.05), less perceived risk of physical inactivity for chronic disease (-.19, p<.01), less alcohol consumption (-0.17, <p<0.01), and greater perceived risk of chronic disease (+.14, p<.01). Furthermore, the perceived risk of smoking and of low fruit and vegetable intake were both lower in those with high God Health Control scores. When analyses were adjusted for importance of religion, all of the above associations lost statistical significance, except the lower perceived risk of physical activity for chronic disease, which continued to be positively related (p=0.001). Importance of religion was also independently related to less physical activity, less alcohol use, and greater perceived risk of chronic disease. Most participants were white (72%), Christian (53%), and had at least some college (76%). Authors concluded that the results of this study provided insights important for future faith-based health behavior change interventions.

Citation: Karvinen KH, Carr LJ (2013). Does the perception that God controls health outcomes matter for health behaviors? Journal of Health Psychology, e-pub ahead of print

Comment: This research among young adults who frequent the Craigslist website suggests that those who believe that God is in control of health (or indicate that religion is very important to them) tend to believe that inactivity poses a low risk for chronic disease, perform less physical activity, and believe that smoking and low fruit and vegetable intake convey a low risk for chronic disease. These negative attitudes toward self-care among religious young adults is concerning, and underscores the need for faith-based health education programs in churches, synagogues, and mosques.

Religiosity and Weight in Asian Indian Immigrants
UCLA researchers analyzed data from a population-based sample of 3,228 immigrant Asian Indians who took part in the 2004 California Asian Indian Tobacco Survey. The purpose was to determine if an association existed between religiosity and being overweight or obese among Asian Indian immigrants living in California. Religiosity was measured using a 3-item index that asked for agreement or disagreement to the statements: “My spiritual beliefs are the foundation of my approach to life”; “I observe the traditional holidays that are important in my culture and religion”; and “I believe that I am a religious person”. Body-mass index was the outcome of interest. The sample was made up of 60% Hindu, 20% Sikh, 5% Islam, 8% other, and 7% atheist/agnostic. Nearly half (43%) strongly agreed that they were religious and 54% strongly agreed that their spiritual beliefs were the inspiration for their approach to life. Analyses were controlled for socio-demographic characteristics (age, gender, marital status, education, income), illness burden, health care access, degree of acculturation, and health behaviors (smoking status). Results: Regression analyses indicated that those scoring in the top quintile (highest one-fifth) on religiosity were over 50% more likely to be overweight or obese (OR=1.53, 95% CI=1.18-2.00), especially among Hindus and Sikhs. Religiosity was inversely related to acculturation and to time spent in the United States.


Comment: Another sobering study that documents high rates of being overweight/obese among immigrants who are devout members of Eastern religions in California. Most interesting is the inverse relationship between religiosity and time spent in the U.S. As East Asian immigrants become more in tune with U.S. cultural practices, their religious faith progressively weakens, according to this study.

Religion and Child Health in the USA
Researchers in the department of economics at George Washington University and The College of New Jersey analyzed data from a national random sample of 2,604 youth ages 6 to 19 years old participating in the 2002 Child Development Supplement to the Panel Study of Income Dynamics (approximately 50% under age 12). The purpose was to examine the relationship between religious involvement and child health. Most responses were given by the primary caregivers (PCG), in 90% of cases the child’s mother. Religious involvement was measured by religious affiliation (90% affiliated), frequency of attendance at religious services (43% weekly or more), and importance of religion (62% very important). Child health was assessed in terms of physical and psychological health. Physical health was determined by a single PCG-rated question whose responses were dichotomized into excellent or very good health vs. good, fair, or poor health. Psychological health was determined by questions asking about hospitalization for mental health problems, suicide attempt, last visit to doctor for mental health problems, diagnosis of serious emotional or behavioral, or PCG indicating that child was often sad, unhappy, or depressed (responses dichotomized into mentally healthy vs. not healthy). Controlled for in the analysis were gender, race, age, breastfed as baby, birthweight, marital status of household head, mother’s education, family income, and mother’s work hours. Results: Probit analysis revealed that children with a religious affiliation had significantly better physical health (B=+0.07, p<0.01), but not better psychological health (B=+0.01, p=ns). Those for whom religion was “very important” also had better physical health (B=+0.06, p<0.01) and better psychological health (B=+0.06, p<0.05). Finally, those who attended religious services at least weekly had better psychological health (B=+0.04, p<0.05), but not better physical health (B=+0.02, p=ns). Associations were strongest in the 12-15 age group (n=806) and weakest in the age 16-19 age group (n=547). Researchers concluded that religious involvement had beneficial relationships with overall physical and psychological health, which appeared to be greatest in early adolescence.

Citation: Chiswick BR, Mirtcheva DM (2013). Religion and child health: Religious affiliation, importance, and attendance and health status among American youth. Journal of Family and Economic Issues 34:120-140 (first highlighted in the July 2012 e-newsletter, the article is now published)

Comment: Although the relationships are not particularly strong, the analyses are well-controlled and the sample was identified.
using a random selection method, adding to the credibility of the findings. Late adolescence (ages 16-19) is a tough time, and there appears to be little association between health and religion in this group (at least based on the present study).

**Spiritual Coping and Anxiety in Palliative Care Patients**

Researchers examined relationships between spiritual coping and anxiety in 31 patients referred to the palliative care unit at New York University’s Langone Medical Center. Anxiety was measured using the first three items of the GAD-7 (a standard measure of anxiety symptoms), whereas spiritual coping was assessed using the 14-item Beliefs and Activities Spirituality Scale (BASS). The BASS was made up of items adapted from Pargament’s Brief RCOPE and Holland’s Brief Spiritual Beliefs Inventory, and consisted of two subscales: (1) “Beliefs” related to God and coping and “Activities” related to religious practices performed to help deal with the illness. Results indicated that both the Beliefs and Activities subscales were inversely related to anxiety (r=-.42, p<0.05, and r=-.52, p<0.05, respectively). After controlling for gender, race, education, and age, the total BASS score remained inversely related to anxiety symptoms (B=-.42, p=0.05), as did the BASS Activities subscale (B=-0.40, p=0.04).

**Mediation and Gene Expression**

Researchers from the University of Barcelona, Spain, and University of Wisconsin-Madison examined the impact of intensive practice of mindfulness meditation (Buddhist) conducted by 19 experienced meditators on gene expression. They were compared to a control group of individuals without meditation experience who responded to a local advertisement. Instead of meditating, controls engaged in leisure type activities such as reading, watching documentaries, playing computer games, or walking. Gene expression was examined for chromatin regulatory enzymes, histone modifications, and pro-inflammatory genes. Those in the experienced meditation group had been engaged in daily meditation practice (30 min or more) for a minimum of 3 years, had attended a minimum of 3 intensive retreats lasting 5 or more days, and had performed an average of 6,240 lifetime hours of Buddhist meditation practice. The meditation intervention involved a one-day of mindfulness meditation lasting 8 hours, during which they listened to inspirational meditation talks, listened to meditation audios, and engaged in various forms of guided, walking, and sitting mindfulness meditation. Blood was drawn immediately prior to the beginning of the session at 8:00A and immediately afterward at 4:00P. Histone fractions and RNA were extracted from peripheral blood mononuclear cells for analysis of histone proteins (Western blot) and gene expression (real-time quantitative PCR).

**Results**: At baseline (prior to the intervention) there were no differences in epigenetic regulatory enzymes or inflammatory gene expressions between the two groups. After the meditation intervention, investigators found significantly reduced expression of histone deacetylase genes, alterations in global modification of histones, and decreased expression of pro-inflammatory genes in meditators compared to controls.


**Comment**: Although not a randomized clinical trial, the results suggest that Buddhist meditation by very experienced meditators over an 8 hour period results in short-term positive changes in gene expression that might reduce levels of inflammation in the body. What is particularly interesting, though, is that baseline levels of genetic expression were no different in the two groups. One might expect that after an average of 6,240 hours of meditation that long-term changes in gene expression might have been present in experienced meditators, rather than only immediately after an 8 hour period of meditation.

**The “Field” of Spirituality and Health**

Writing in Academic Medicine, the flagship journal of the Association of American Medical Colleages (AAMC), Christina Puchalski and colleagues describe the history of the field of spirituality and health, including its origins, its furtherance through the National Competencies in Spirituality and Health for medical schools that were developed during a consensus conference attended by faculty from seven medical schools. 

**Citation**: Puchalski CM, Blatt B, Kogan M, Butler A (2014). Spirituality and health: The development of a field. Academic Medicine 89:10-14

**Comment**: Although the article does not address the development of spirituality and health as a research field, it does describe the work of Dr. Puchalski and her colleagues at GWISH and their engagement with the Association of American Medical Colleges in terms of medical education.

**NEWS**

**Farr Curlin now at Duke**

We are thrilled to announce that Dr. Farr Curlin is now at Duke. A hospice and palliative care physician, religion-health researcher, medical ethicist, and founder and co-director of the Program on Religion and Medicine at the University of Chicago from 2008 to 2013, Dr. Curlin on January 1 became the Josiah C. Trent Professor of Medical Humanities in the Trent Center for Bioethics, Humanities & History of Medicine at Duke University. He holds joint appointments in the Department of Medicine and the Duke Divinity School, where he will work to develop an Initiative on Theology, Medicine and Culture. He will also work closely with us in the Center for Spirituality, Theology and Health.

**SPECIAL EVENTS**

**12th Annual David B. Larson Memorial Lecture** (Durham, NC, March 6, 2014)

**YOU WON’T WANT TO MISS** our Center’s annual lecture in honor of David B. Larson, a psychiatrist and researcher who helped start the field of religion and health. This year’s address is being delivered by the renowned Stanley Hauerwas, Gilbert T. Rowe Professor of Theological Ethics at Duke University Divinity School. Dr. Hauerwas has been ranked by Time Magazine as America’s top theologian. The title of his presentation is particularly relevant this year “Suffering Presence: Twenty Five Years Later,” as he reflects on how his thinking has changed since the publication of his 1986 book Suffering Presence: Theological Reflections on Medicine, the Mentally Handicapped. For details about the location and time of the lecture go to website: http://www.spiritualityandhealth.duke.edu/education/larson/index.html. No reservations are needed and there is no fee to attend the lecture. However, the room is likely to be filled so plan on arriving early (lecture starts at 5:30P).
Spiritual Distress Assessment Tool (online presentation) 
(February 4, 2014) 
George Fitchett, Dmin, PhD, BCC, and Sr. Patricia Murphy, PhD, BCC, will be discussing a model and tool for assessing spiritual distress. This tool was developed by a research team in Switzerland that established the reliability and validity of the measure in 203 geriatric rehabilitation patients. The presentation is sponsored by the Association of Professional Chaplains (APC) as part of their Webinar Journal Club. The event aims to (1) make chaplains aware of a quantitative approach to describing chaplain-assessed spiritual needs of patients, (2) make chaplains aware of important methods for testing the validity and reliability of a model for assessing patients’ spiritual distress, and (3) help chaplains develop and maintain research literacy, including the ability to critically read research and where appropriate apply the findings in their professional practice. This webinar provides 1 hour of CE credit. To learn more or sign up, go to website: 
http://www.professionalchaplains.org/calendar_list.asp. Although the registration deadline was January 24, APC can be contacted directly and may be able to fit in late registrants.

2014 Chaplain Symposium at the Mayo Clinic (Rochester, MN, March 6, 2014) 
The Association of Professional Chaplains is sponsoring a symposium to be given to a live audience, while simultaneously being made accessible to a remote viewing audience via the Internet. The theme of the symposium is “Aligning chaplaincy with emerging health care realities.” Speaker presentations include “The journey to health reform and its implications for chaplains” (examines the Affordable Care Act and the resultant Accountability Care Organizations), “HCAHPS 101 for chaplains: What is it, why is it so important, and how can chaplains make a positive impact?” (explores the relatively new Hospital Consumer Assessment of Healthcare Providers and Systems now impacting acute care settings), and “These Changing Times: Integrating Chaplaincy into Hospital Systems and Culture” (gives chaplains concrete tools to navigate the system in times of great change and stress for their institutions). For more info, see 

3rd Annual Conference on Medicine and Religion (Chicago, Illinois) (March 7-9, 2014) 
Conference planners -- Program on Medicine and Religion -- at the University of Chicago invite health professionals and other interested parties to attend this year’s meeting titled “Responding to the Limits and Possibilities of the Body,” which is being held at the Hyatt Chicago. The focus of the conference in on questions like: To whom does the body belong? How is one’s body related to oneself? What is a normal human body? What, if anything, does the human body tell us about how medicine should respond to bodily suffering and death? What kind of knowledge about human embodiment can science give vis-à-vis the great religions? These questions are being asked in the context of the traditions and practices of Judaism, Christianity, and Islam. The conference is being co-sponsored by the Institute for Spirituality and Health at Texas Medical Center (Houston). For more information go to 

4th European Conference on Religion, Spirituality and Health (ECRSH14) (Island of Malta, May 22-24, 2014) 
The European Conference on Religion, Spirituality and Health will focus this year on the integration of religion and spirituality into clinical practice. Keynote speakers approach the topic from a broad range of professional backgrounds, including nursing, medicine, theology, and chaplaincy. For more information about the conference -- to be held on the beautiful historic island of Malta off the coast of Italy -- go to: http://ecrsh.eu/.

Spirituality and Health Research Workshop (Malta, May 18-21, 2014) 
Preceding the ECRSH14 above will be a 4-day Pre-Conference Research Workshop. This workshop covers about 75% of the material presented during the Duke Summer Research Workshop below. The workshop is open to all those interested in doing research on religion, spirituality and health (including those at any level of training, but particularly chaplains, physicians, nurses, psychologists, counselors, theologians, public health specialists, epidemiologists, or other health professionals). This workshop is filling up quickly, so those who wish to attend need to register immediately. For more information go to: 

Duke Summer Spirituality & Health Research Workshops 
(Durham, NC) (August 11-15, 2014) 
Register now for a spot in our 2014 research workshop on spirituality & health. The workshop is designed for those interested in conducting research in this area or learning more about the research that has already been done. Those with any level of training or exposure to the topic will benefit from this workshop, from laypersons to graduate students to full-time professors at leading academic institutions. Over 650 persons have attended this workshop since 2003. Individual mentorship is being provided to those who need help with their research or desire career guidance. Partial tuition scholarships will be available for those with strong academic potential and serious financial hardships. For more information, see website: 
http://www.spiritualityhealthworkshops.org/

RESOURCES

Annals of the New York Academy of Sciences: Meditation 
For readers interested in meditation, the January issue of the New York Academy of Sciences is devoted to advances in meditation research with a focus on neuroscience and clinical applications. Articles in this issue include: “Transcendental experiences during meditation practice”; “Neural correlates of nondual awareness in meditation”; “The posterior cingulate cortex as a plausible mechanistic target of meditation: findings from neuroimaging”; “Mapping modalities of self-awareness in mindfulness practice”; “Exploring age-related brain degeneration in meditation practitioners”; “Meditation and neurodegenerative diseases”; “Meditation improves self-regulation over the life span”; and several others. The focus is on Eastern forms of meditation (Buddhist and Hindu). For more information, go to website 

Neuroscience, Psychology and Religion (Templeton Press, 2009) 
Given the new rage over neuroscience and religion (sometimes now called “neurotheology”), here is a good primer on the topic. Malcolm Jeeves and Warren S. Brown provide an overview of the relationship between neuroscience, psychology, and religion that is academically sophisticated, yet accessible to the general reader. Available ($14.36) at: 
http://templetonpress.org/content/neuroscience-psychology-and-religion-0.

Spirituality in Patient Care, 3rd Ed (Templeton Press, 2013) 
The 3rd edition provides the latest information on how health professionals can integrate spirituality into patient care by identifying and addressing the spiritual needs of patients. Chapters
are targeted to the needs of physicians, nurses, chaplains, mental health professionals, social workers, and occupational and physical therapists. Available ($22.36) at: http://templetonpress.org/book/spirituality-patient-care

**Handbook of Religion and Health (2nd Ed)** (Oxford University Press, 2012)

**Spirituality & Health Research: Methods, Measurement, Statistics, & Resources** (Templeton Press, 2011)
This book summarizes and expands the content presented in the Duke’s Research Workshop on Spirituality and Health (see above), and is packed full of information necessary to conduct research on this topic. Available ($39.96) at: http://templetonpress.org/book/spirituality-and-health-research.

**FUNDING OPPORTUNITIES**

**Faith, Spirituality and Health Grants – 2014 Competition**
The Covenant Health Research Centre and St. Joseph’s College at the University of Alberta in Edmonton, has issued a call for letters of intent for research and projects that examine the interaction of faith, spirituality, health and healing. These grants are intended to support research and education that: (1) documents the effects of religious or spiritual practices on health (where “health” is broadly defined as more than physical health, but as human flourishing; and health includes the promotion and maintenance of health, along with the prevention and treatment of disease); (2) investigates the mechanisms by which religion and spirituality may impact health; (3) explores how spiritual/religious values and beliefs impact health-related decision making; (4) investigates the ways medical professions integrate spirituality into their practice, along with educational methods that include spirituality in training for healthcare providers; and (5) interprets what the findings mean for individuals, congregations, academic communities and healthcare providers through transdisciplinary collaboration. Maximum amount that can be requested is $25,000 CDN, and up to 3 grants will be awarded. The grant is open to academics, students and healthcare providersclinicians of all nationalities, and may be used for research (including theses and dissertations) and educational projects (including conferences or symposia), but not applicants’ salaries. Deadline for submission of letters of intent is **February 3, 2014**. Successful applicants will be notified by March 7 and will be asked to submit full proposals, which will be due May 12. Applicants will be notified of the decision on June 18. For more information go to website: http://www.caritas.ab.ca/Home/Research/ForResearchers/GrantRequests/FaithSpiritualityHealthGrant.

**Templeton Foundation Online Funding Inquiry (OFI)**
The Templeton Foundation will be accepting the next round of letters of intent for research on spirituality and health between **February 2 and April 1, 2014**. If the funding inquiry is approved (applicant notified by May 2, 2014), the Foundation will ask for a full proposal that will be due September 2, 2014, with a decision on the proposal reached by December 20, 2014. The three main areas in religion, spirituality and health that the Foundation funds are: (1) research on causal mechanisms (basic psychosocial, behavioral, and physiological pathways), (2) increasing competencies of health care professionals in working with religious patients (physicians, but also psychologists and experts in public health), and (3) research involving the development of religious-integrated interventions that lead to improved health. More information: http://www.templeton.org/what-we-fund/our-grantmaking-process.

**Grand Challenges Explorations**
On November 20, the Bill & Melinda Gates Foundation announced grand award grants for the latest round (Round 12) of the Grand Challenges Explorations program. Over 80 new grants of $100,000 were made to investigators from 14 countries through this program during that round. The initiative funds innovative ideas to solve some of the greatest challenges in global health and development. Persons from any discipline can apply, from students to tenured professors. This initiative uses an accelerated grant-making process with short two-page applications and no preliminary data are required. Applications are submitted online and winning grants are chosen approximately 5 months from the submission deadline. Initial grants of $100,000 are awarded two times a year. Successful projects have the opportunity to receive a follow-on grant of up to $1 million. The next round of Grand Challenges Explorations (round 13) will open in **March 2014**. For more information go to website: http://www.grandchallenges.org/Explorations/Pages/ApplicationInstructions.aspx. Identifying ways that religious involvement and faith-based programs can improve global health is a novel idea that needs to be explored, and here is a potential source of funds to do just that.

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**2014 CSTH CALENDAR OF EVENTS…**

**February**

2 A Christian response to those with chronic mental illness
Healthy Ministries, University United Methodist Church
Chapel Hill, North Carolina
Presenter: Koenig and others
Contact: Jane Campbell (janegerocns@aol.com)

26 Pastors’ reactions to research on spirituality and health
William H. Willimon
Bishop, United Methodist Church
Professor of the Practice of Christian Ministry, DDS
Center for Aging, 3rd floor, Duke South, 3:30-4:30
Contact: Harold G. Koenig (Harold.Koenig@duke.edu)

**March**

12th Annual David B. Larson Memorial Lecture

**Suffering Presence: Twenty Five Years Later**
Presenter: Stanley Hauerwas
Gilbert T. Rowe Professor of Theological Ethics
Durham, NC, Duke North, Room 2001, 5:30-6:30
Contact: Harold G. Koenig (Harold.Koenig@duke.edu)

**Spirituality in Medicine**
Department of Family & Community Medicine
Reading, Pennsylvania
Presenter: Koenig
Con: Ted Asfaw (Thewodros.Asfaw@readinghealth.org)

**Caregiver Outlook: A Chaplain-led Intervention in Serious Illness**
Karen Steinhauser, Ph.D.
Associate Professor, Department of Medicine, DUMC
Center for Aging, 3rd floor, Duke South, 3:30-4:30
Contact: Harold G. Koenig (Harold.Koenig@duke.edu)
Partner with Us

The Center needs your support to continue its mission and outreach.

Website: http://www.spiritualityandhealth.duke.edu/about/giving.html