

# Climate change and public health: A faith and psychological science perspective

Joel Nigg, Ph.D.

Departments of Psychiatry and Behavioral  
Neuroscience

Oregon Health & Science University

Physicians for Social Responsibility

Archdiocesan Commission for  
Evangelization of Laudato Si

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# Today

- Laudato Si as integrative viewpoint
  - Compatibility with biological and neurosciences
- Climate and health—systems view
- Mental health as a particular neglected focus



Pope Francis' encyclical

# *Laudato Si'*

*(Praise be to You)*

ON THE CARE OF  
OUR COMMON HOME

# Misconceptions and Myths on Laudato Si

- “The pope is meddling in politics” —this is a moral document on spirituality
- “This is a climate/green/environmental encyclical” —this is a social encyclical offering a deep spirituality of interconnections
- “The pope is not a scientist” — science cited in this encyclical is solid—pope had good advisors!
- “This is a radical departure” —in fact he restates long-standing Catholic teaching—(and joins with prior statements from other churches)

FRANCESCO, VA E RIPARA  
LA NOSTRA CASA





“... how inseparable the bond is between concern for nature, justice for the poor, commitment to society, and interior peace.”

- Pope Francis, *Laudato Si*, n 10.

[www.social-spirituality.net](http://www.social-spirituality.net)

Para 139 “We are faced not with two separate crises, one environmental and the other social, but rather with one complex crisis which is both social and environmental.”

# Coherence of integration message

- Links ecosystem degradation with human justice and welfare—inseparable
- Links physical world with spirituality—spiritual roots of crisis
- Importance of spiritual transformation; refutes a merely technocratic perspective on problem
- Scientifically this integration make sense and converges with bioecological theories of human life

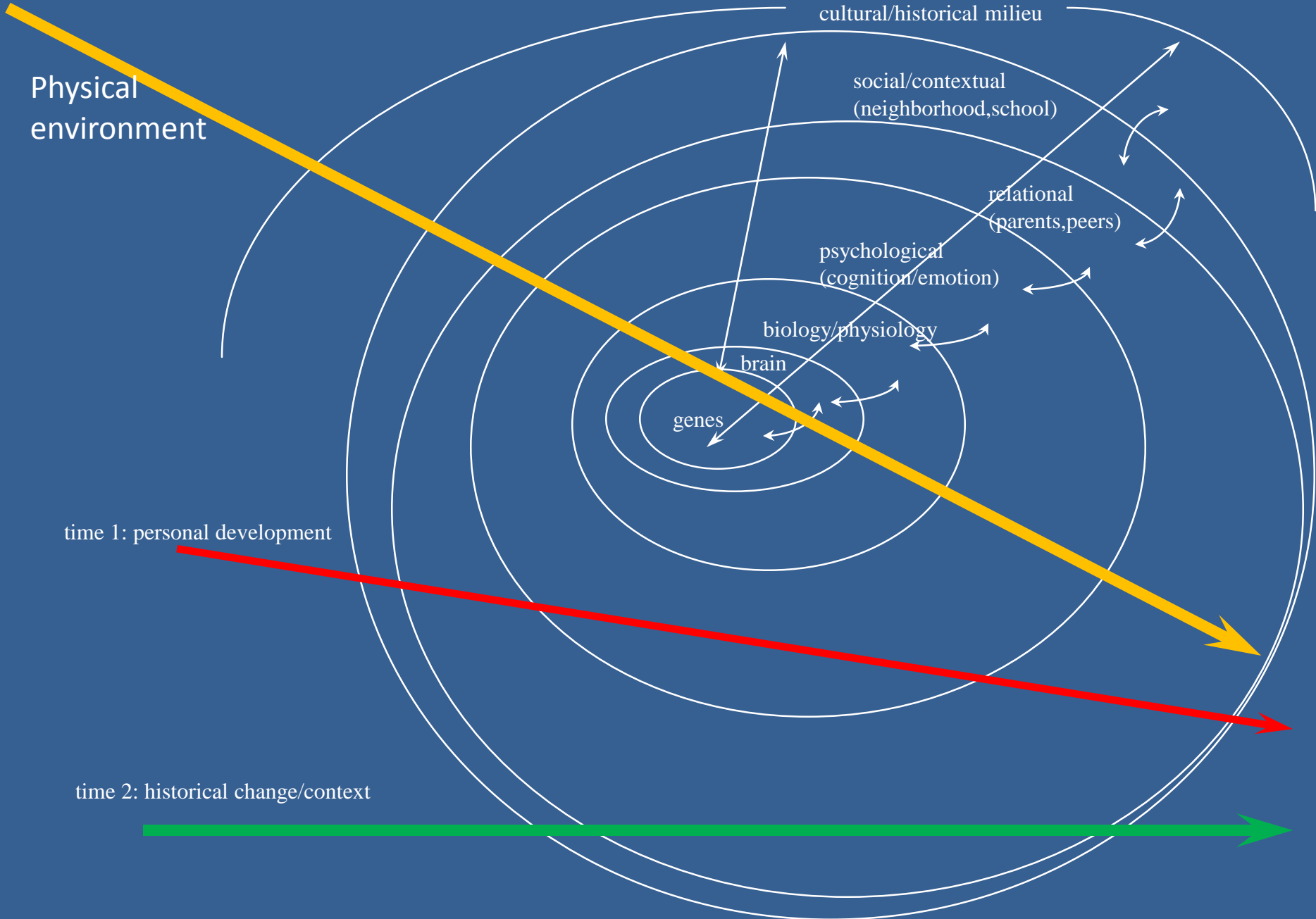
# Four Christian Ethical Principles REFlected in laudato si

- Responsibility: “Today we know more” (Arrupe)
  - Knowledge is from God to serve God (Aquinas)
- Solidarity: Preferential option for the poor (Puebla)
  - And Rights and Protection of Workers (Pius XII)
  - Economy is for human life not the reverse
- Web of Life: Human for creation not reverse (Johnson)
- Prophetic History: Signs of the times (Vatican II)
  - Economic signs: Rich-poor disparity, unrest
  - Ecological signs: Melting glaciers, acidifying oceans, etc



**THE EMPIRICAL PERSPECTIVE:  
HUMAN PERSON AND CONTEXT**

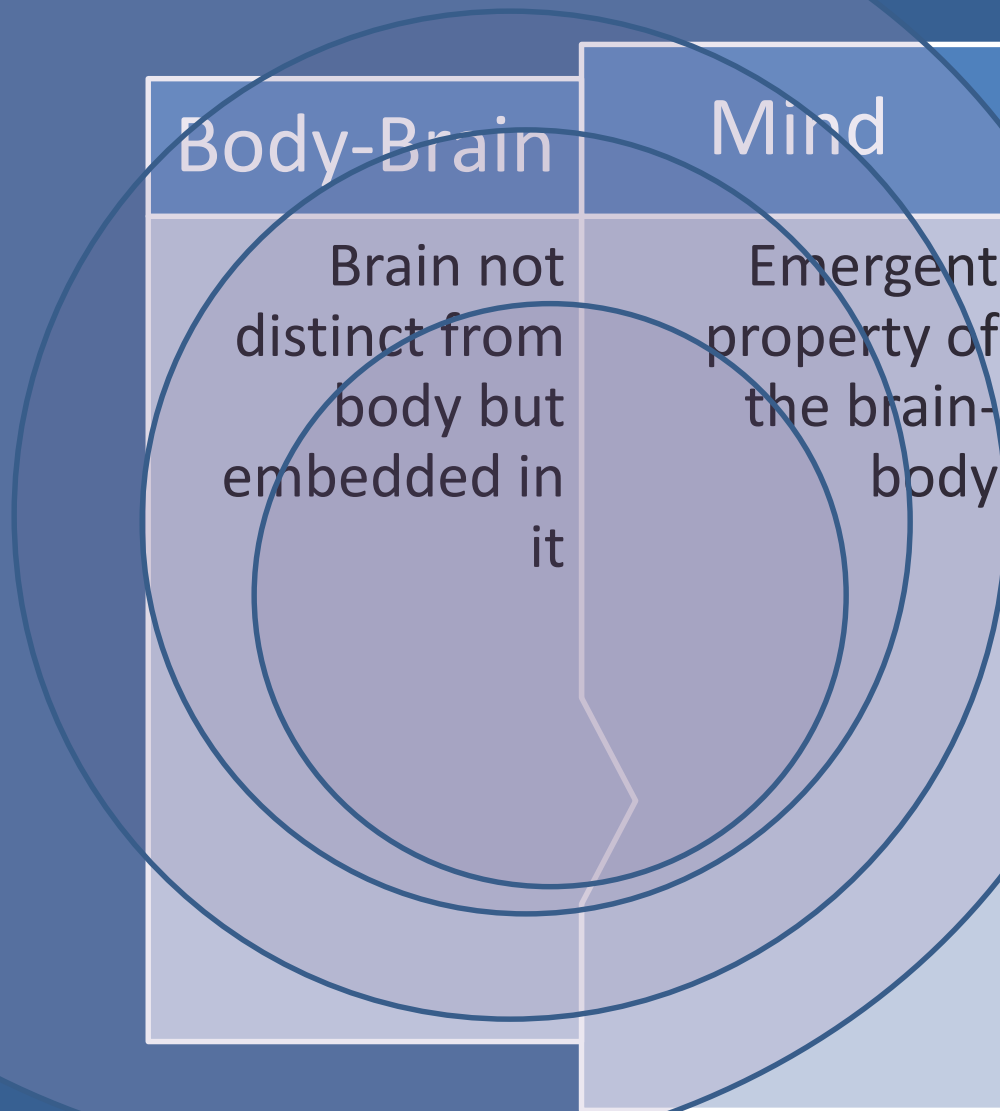
A general systems model of human organism development



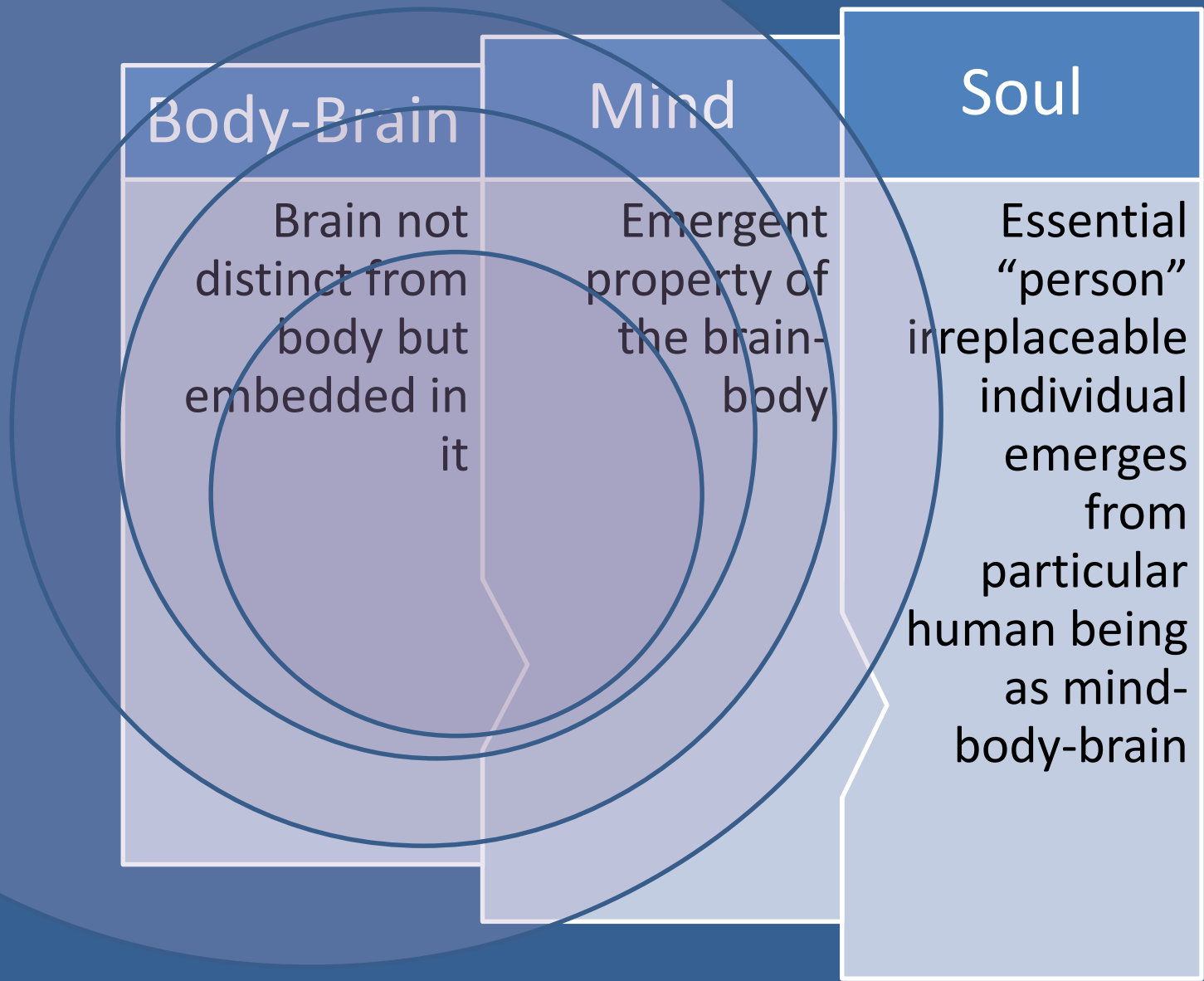
## Body-Brain

Brain not  
distinct from  
body but  
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it

# Emergence view of the integrated human in integrated systems context



Emergence view of the integrated human in integrated systems context



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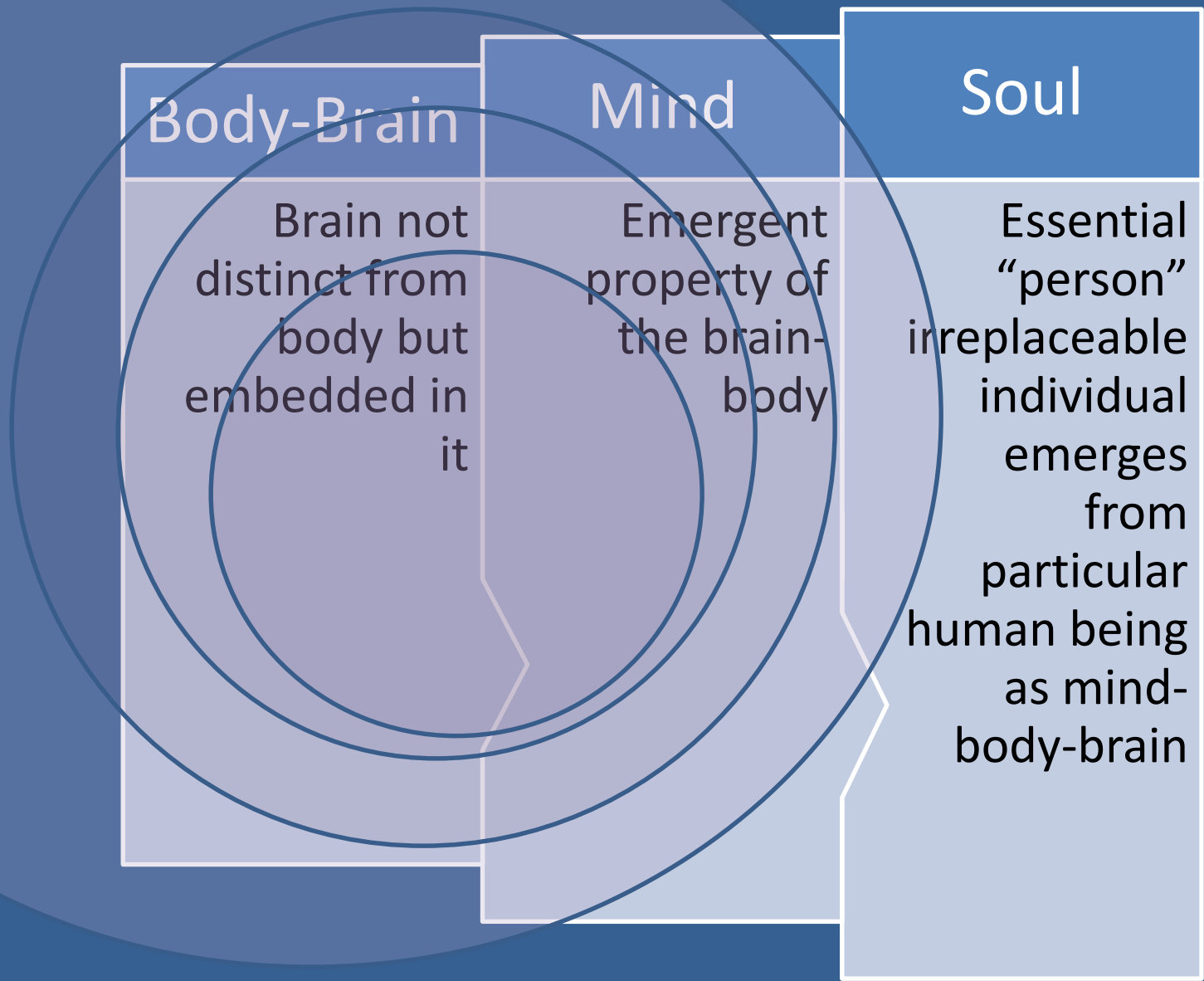
Mind

Emergent property of the brain-body

Soul

Essential "person" irreplaceable individual emerges from particular human being as mind-body-brain

Emergence view of the integrated human in integrated systems context



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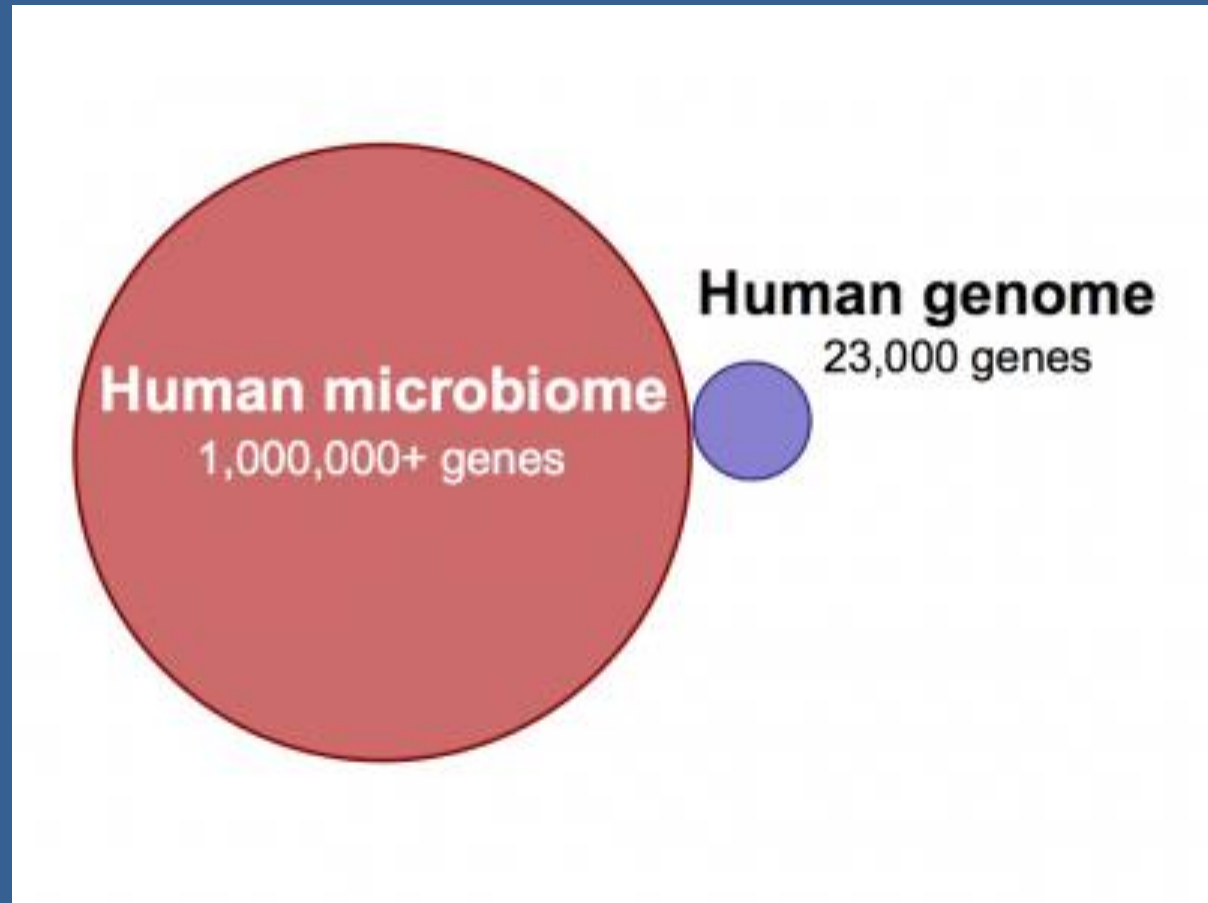
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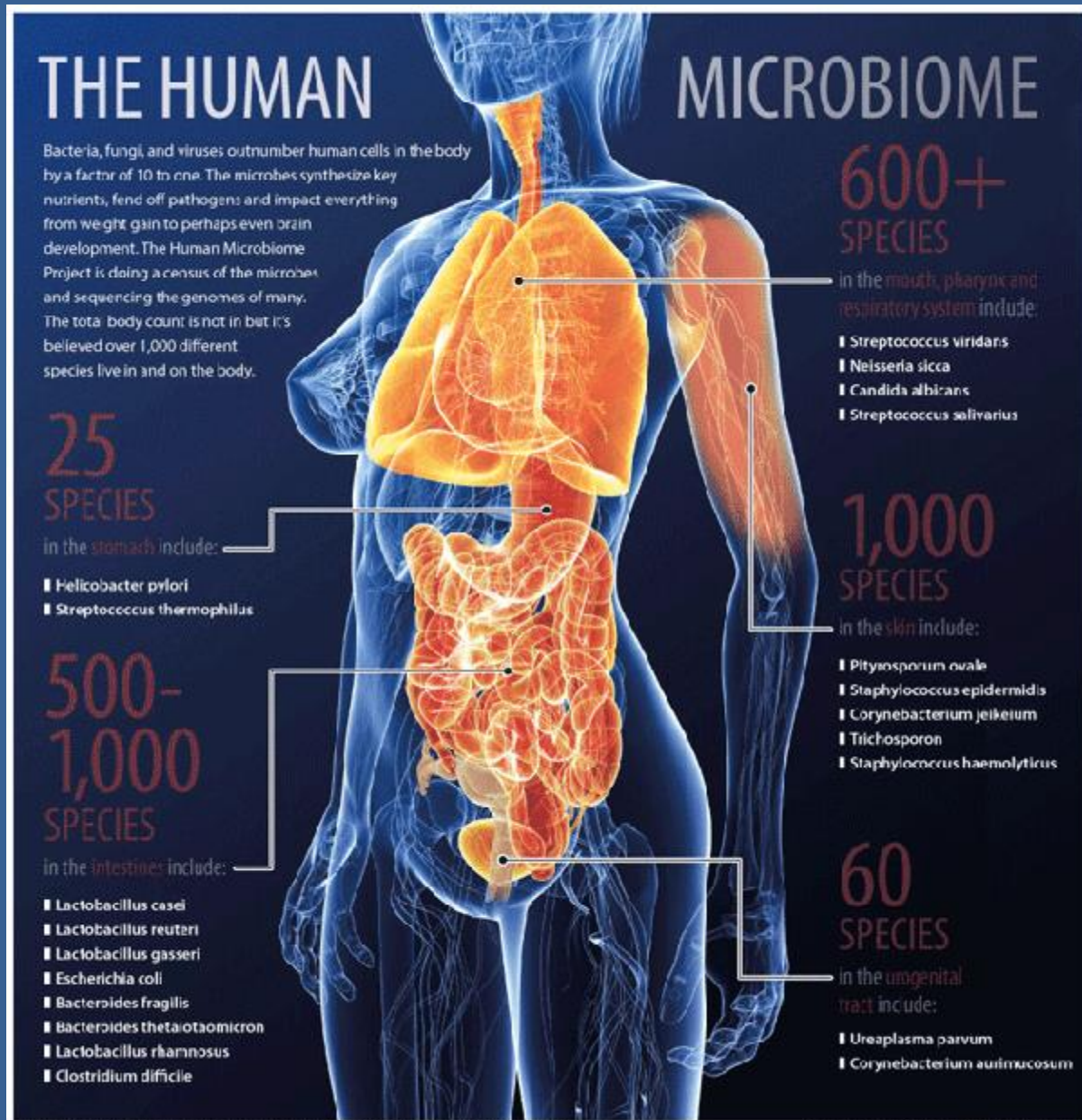
Essential "person" irreplaceable individual emerges from particular human being as mind-body-brain

Integrated spirituality view is congruent with biological sciences: WE ARE NOT DISTINCT FROM OUR ECOSYSTEM: WE CO-EVOLVED and EMERGED FROM IT

...Some see the human body as a superorganism whose “whose metabolism represents an amalgamation of microbial and human attributes. --Gill et al (2006), Science, 312, 1355-9 (2006 Jun 2)



We are not separate from the earth: we are co-organisms, coated and imbued with other creatures that sustain us and evolved with us





# MENTAL HEALTH ASPECTS

Many health and mental health groups now engaged in urgent public health implications of climate change, one example:

MENTAL HEALTH AND OUR CHANGING CLIMATE: IMPACTS, IMPLICATIONS, AND  
GUIDANCE

March 2017

Task Force Report Co-Developed by



<https://www.apa.org/news/press/releases/2017/03/mental-health-climate.pdf>

Growing national and professional concern:

Both APA-Psychology and APA-Psychiatry have taken public policy positions on climate change effects on mental health and illness



# Mental health and physical health effects are combined, not distinct

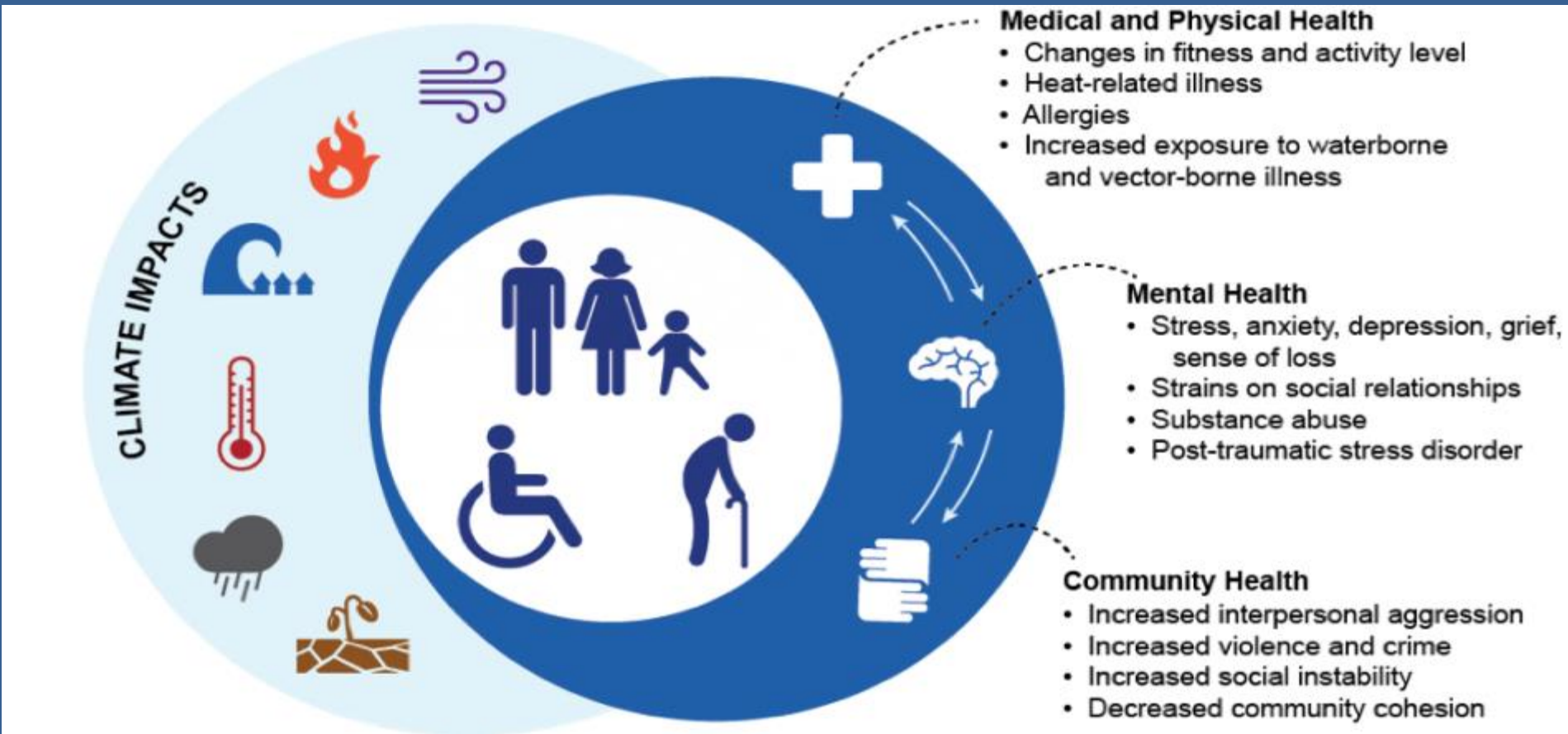


Image © American Psychiatric Association, <https://www.psychiatry.org/patients-families/climate-change-and-mental-health-connections>



Another view  
of integration

Image © Task force report  
<http://ecoamerica.org/wp-content/uploads/2017/03/ea-apa-psych-report-web.pdf>

# Mental health: Indirect effects

- Mental health impacts from natural disasters and forced migration
  - PTSD
  - Addiction
  - Depression
  - Anxiety
- Global coping and stress from uncertainty
  - Food, water, infrastructure damages, costs

“Renée Funk, who manages hurricane response teams for the Centers for Disease Control and Prevention, says ...mental illness and substance abuse not secondary problems—they are the primary long-term effect of natural disasters.”

-Politico, 10/12/2017

<https://www.politico.com/agenda/story/2017/10/12/psychological-toll-natural-disasters-000547>

# Example of many findings post Katrina

- K. Sakauye, U.S. Psychiatric & Mental Health Congress, 2006, on Katrina response
  - 61% increase in crisis line calls (despite lower population)
  - 44% of children had new mental health problems
  - 68% increase in mental health conditions among parents and caregivers post Katrina
  - Cognitive and memory problems (anecdotal)



# Mental health: Direct effects

- Heat wave effects include increase in
  - aggression and violence
  - Suicide
  - Psychosis and manic breakdowns
  - Depression
  - Death—50% of deaths = ppl with mental illness (medication)
  - 1 billion extra people/year exposed to heat wavs by 2040--Lancet
- Solastalgia: (Albrecht,) psychological response to degradation of your home: hopelessness, anger, sadness, discomfort
- Intense feelings of loss, fatalism
- Mental health emergencies
- Pollution effects on brain development, function
  - 87% of cities worldwide exceed WHO guidelines-Lancet
- Stress effects on sleep, anxiety, depression
  - human-caused problem, most difficult to cope with psychologically

Problems will not ebb and flow—they will accumulate, adding ever increasing pressure to human psychological resources

4 degrees C LEFT

2 degrees C (right)



**SO WHAT NOW?**

# Solutions

- Advocate policy
  - Reduce GHG pollution—support Oregon’s Clean Energy Jobs bill (SB 1070) in the upcoming session
  - Minimize disaster-creating plans (e.g., building on flood plains)
  - Support climate/weather migrants
- Include mental health/resiliency in community planning and preparation
- You are not alone

# Role of faith communities

- Building resilience
  - social support, connectedness, active engagement and coping, meaning
- Develop strong internal coping skills together
  - Support movement from denial, moral superiority to grief and adaptive action
  - Support movement from toxic dysregulation/denial to practical coping
  - Pivot from negativity to solutions
  - Pivot from blame/passivity to ownership/autonomy
  - Overcome partisanship which stifles constructive discussion
- Advocacy for the most vulnerable, for climate justice
- Protect the psychologically vulnerable in your community
- Building a spirituality that enables and empowers integrated response

END

- Thank you