

# Index

## Activin

- dorsoventral and anteroposterior patterning of *Xenopus* mesoderm: SLACK, ISAACS, JOHNSON, LETTICE, TANNAHILL AND THOMPSON 143.
- mesoderm induction and gastrulation: SMITH AND HOWARD 127.

## Adhesive preferences

- regulation of cell interactions: RUTISHAUSER 99.

## Amphibian embryo

- chick and frog mesoderm induction and axis formation: STERN, HATADA, SELLECK AND STOREY 151.

## Anterior-posterior patterning

- induction of *Hox-2* genes by retinoic acid: DEKKER, PANNESE, HOUTZAGER, TIMMERMANS, BONCINELLI AND DURSTON 195.
- planar signals in neural patterning: DONIACH 183.

## Anteroposterior specification

- dorsoventral and anteroposterior patterning of *Xenopus* mesoderm: SLACK, ISAACS, JOHNSON, LETTICE, TANNAHILL AND THOMPSON 143.

## Antisense oligos

- cytokeratin in *Xenopus* gastrulation: HEASMAN, TORPEY AND WYLIE 119.

## Archenteron

- pattern formation in sea urchin gastrulation: MCCLAY, ARMSTRONG AND HARDIN 33.

## Ascidian egg

- a gastrulation center in the ascidian egg: JEFFERY 53.

## Axis formation

- a gastrulation center in the ascidian egg: JEFFERY 53.

## Axon outgrowth

- regulation of cell interactions: RUTISHAUSER 99.

## Blastomere

- gastrulation in *Fundulus*: TRINKHAUS 75.

## Blastula

- mesoderm induction in *Xenopus*: GURDON, KAO, KATO AND HOPWOOD 137.

## BMP-4

- mesoderm induction and gastrulation: SMITH AND HOWARD 127.

## *Brachydanio rerio*

- cell fate in the zebrafish: HO 65.

## *Brachyury*

- effect on mouse gastrulation and organogenesis: BEDDINGTON, RASHBASS AND WILSON 157.

## Cell adhesion

- gastrulation and the evolution of development: WOLPERT 7.

## Cell cycle

- gastrulation and the evolution of development: WOLPERT 7.

## Cell fate

- cell fate in the zebrafish: HO 65.
- cell interactions in the sea urchin embryo: ETTENSOHN 43.

## Cell interaction

- cell interactions in the sea urchin embryo: ETTENSOHN 43.
- regulation of cell interactions: RUTISHAUSER 99.

## Cell lineage

- cell interactions in the sea urchin embryo: ETTENSOHN 43.

## Cell migration

- mesoderm induction and gastrulation: SMITH AND HOWARD 127.

## Cell motility

- gastrulation in *Fundulus*: TRINKHAUS 75.

## Cell movement

- cell fate in the zebrafish: HO 65.

## Cell polarity

- mouse early embryo differentiation: FLEMING, JAVED AND HAY 105.

## Chick embryo

- chick and frog mesoderm induction and axis formation: STERN, HATADA, SELLECK AND STOREY 151.

## Chicken blastoderm

- fate map with time-lapse videography: BORTIER AND VAKAET 93.

## Chimeric analysis

- Brachyury* effect on mouse gastrulation and organogenesis: BEDDINGTON, RASHBASS AND WILSON 157.

## Cingulin

- mouse early embryo differentiation: FLEMING, JAVED AND HAY 105.

## Commitment

- cell fate in the zebrafish: HO 65.

## Compaction

- gap junctions in the mouse embryo: BECKER, LECLERC-DAVID AND WARNER 113.

## Connexin 43

- gap junctions in the mouse embryo: BECKER, LECLERC-DAVID AND WARNER 113.

## Convergence

- and extension in *Xenopus*: KELLER, SHIH AND DOMINGO 81.
- mesoderm induction and gastrulation: SMITH AND HOWARD 127.

## Cytokeratin

- in *Xenopus* gastrulation: HEASMAN, TORPEY AND WYLIE 119.

## Desmosome

- mouse early embryo differentiation: FLEMING, JAVED AND HAY 105.

## dorsal

- control of *Drosophila* dorsoventral development: THISSE AND THISSE 173.

## Dorsoventral specification

- control of *Drosophila* dorsoventral development: THISSE AND THISSE 173.
- dorsoventral and anteroposterior patterning of *Xenopus* mesoderm: SLACK, ISAACS, JOHNSON, LETTICE, TANNAHILL AND THOMPSON 143.

## *Drosophila*

- early mesoderm formation: LEPTIN, CASAL, GRUNEWALD AND REUTER 23.
- gastrulation and the evolution of development: WOLPERT 7.
- role of *gooseoid* in gastrulation: DE ROBERTIS, BLUM, NIEHRS AND STEINBEISSER 167.

## Embryonic axis

- chick and frog mesoderm induction and axis formation: STERN, HATADA, SELLECK AND STOREY 151.

## Embryonic stem cell

- Brachyury* effect on mouse gastrulation and organogenesis: BEDDINGTON, RASHBASS AND WILSON 157.

## Endoderm

- pattern formation in sea urchin gastrulation: MCCLAY, ARMSTRONG AND HARDIN 33.

## engrailed

- planar signals in neural patterning: DONIACH 183.

## Epithelial-mesenchymal interaction

- convergence and extension in *Xenopus*: KELLER, SHIH AND DOMINGO 81.

**Evolution**

gastrulation and the evolution of development: WOLPERT 7.  
of developmental decisions and morphogenesis: RAFF 15.

**Explant**

convergence and extension in *Xenopus*: KELLER, SHIH AND DOMINGO 81.

**Expression**

*Brachyury* effect on mouse gastrulation and organogenesis: BEDDINGTON, RASHBASS AND WILSON 157.

**Extension**

and convergence in *Xenopus*: KELLER, SHIH AND DOMINGO 81.

**Extraembryonic fate**

cell fate in the zebrafish: HO 65.

**Fate map**

cell fate in the zebrafish: HO 65.  
retinoic acid and the late phase of neural induction: SHARPE 203.  
studied with time-lapse videography: BORTIER AND VAKAET 93.

**Fibroblast growth factor (FGF)**

dorsoventral and anteroposterior patterning of *Xenopus* mesoderm: SLACK, ISAACS, JOHNSON, LETTICE, TANNAHILL AND THOMPSON 143.  
mesoderm induction and gastrulation: SMITH AND HOWARD 127.

***Fundulus***

gastrulation: TRINKHAUS 75.

**Gap junction**

in the mouse embryo: BECKER, LECLERC-DAVID AND WARNER 113.

**Gastrula**

mesoderm induction in *Xenopus*: GURDON, KAO, KATO AND HOPWOOD 137.

**Gastrulation**

convergence and extension in *Xenopus*: KELLER, SHIH AND DOMINGO 81.  
dorsoventral and anteroposterior patterning of *Xenopus* mesoderm: SLACK, ISAACS, JOHNSON, LETTICE, TANNAHILL AND THOMPSON 143.  
mesoderm induction and gastrulation: SMITH AND HOWARD 127.  
role of *gooseoid* in gastrulation: DE ROBERTIS, BLUM, NIEHRS AND STEINBEISSER 167.

**Gastrulation center**

in the ascidian egg: JEFFERY 53.

**Gene function**

evolution of developmental decisions and morphogenesis: RAFF 15.

**Germ band extension**

early *Drosophila* mesoderm formation: LEPTIN, CASAL, GRUNEWALD AND REUTER 23.  
role of *gooseoid* in gastrulation: DE ROBERTIS, BLUM, NIEHRS AND STEINBEISSER 167.

***Heliocidaris***

evolution of developmental decisions and morphogenesis: RAFF 15.

**Hensen's node**

chick and frog mesoderm induction and axis formation: STERN, HATADA, SELLECK AND STOREY 151.

**Homeobox**

role of *gooseoid* in gastrulation: DE ROBERTIS, BLUM, NIEHRS AND STEINBEISSER 167.

**Hox genes**

induction of *Hox-2* genes by retinoic acid: DEKKER, PANNESE, HOUTZAGER, TIMMERMANS, BONCINELLI AND DURSTON 195.

**Induction**

convergence and extension in *Xenopus*: KELLER, SHIH AND DOMINGO 81.  
mesoderm induction in *Xenopus*: GURDON, KAO, KATO AND HOPWOOD 137.

**Inner cell mass**

mouse early embryo differentiation: FLEMING, JAVED AND HAY 105.

**Integrin**

mesoderm induction and gastrulation: SMITH AND HOWARD 127.

**Interaction**

cell interactions in the sea urchin embryo: ETTENSOHN 43.

**Intercalation**

convergence and extension in *Xenopus*: KELLER, SHIH AND DOMINGO 81.

**Intercellular communication**

mesoderm induction in *Xenopus*: GURDON, KAO, KATO AND HOPWOOD 137.

**Intercellular junction**

mouse early embryo differentiation: FLEMING, JAVED AND HAY 105.

**Intermediate filament**

cytokeratin in *Xenopus* gastrulation: HEASMAN, TORPEY AND WYLIE 119.

**Invagination**

pattern formation in sea urchin gastrulation: MCCLAY, ARMSTRONG AND HARDIN 33.

**Keller explants**

planar signals in neural patterning: DONIACH 183.

***Kruppel***

gastrulation and the evolution of development: WOLPERT 7.

**Margin cell**

cell fate in the zebrafish: HO 65.

**Maternal mRNA**

cytokeratin in *Xenopus* gastrulation: HEASMAN, TORPEY AND WYLIE 119.

**Mesoderm**

cell fate in the zebrafish: HO 65.  
cell interactions in the sea urchin embryo: ETTENSOHN 43.  
early *Drosophila* mesoderm formation: LEPTIN, CASAL, GRUNEWALD AND REUTER 23.  
mesoderm induction in *Xenopus*: GURDON, KAO, KATO AND HOPWOOD 137.  
pattern formation in sea urchin gastrulation: MCCLAY, ARMSTRONG AND HARDIN 33.

**Mesoderm induction**

and gastrulation: SMITH AND HOWARD 127.  
chick and frog mesoderm induction and axis formation: STERN, HATADA, SELLECK AND STOREY 151.  
dorsoventral and anteroposterior patterning of *Xenopus* mesoderm: SLACK, ISAACS, JOHNSON, LETTICE, TANNAHILL AND THOMPSON 143.

**Midblastula transition**

gastrulation in *Fundulus*: TRINKHAUS 75.

**Mitosis**

gastrulation in *Fundulus*: TRINKHAUS 75.

**Morphogenesis**

convergence and extension in *Xenopus*: KELLER, SHIH AND DOMINGO 81.

**Motility**

convergence and extension in *Xenopus*: KELLER, SHIH AND DOMINGO 81.

**Mouse**

*Brachyury* effect on gastrulation and organogenesis: BEDDINGTON, RASHBASS AND WILSON 157.

- mouse early embryo differentiation: FLEMING, JAVED AND HAY 105.
- role of *gooseoid* in gastrulation: DE ROBERTIS, BLUM, NIEHRS AND STEINBEISSER 167.
- Mouse embryo**  
gap junctions in the mouse embryo: BECKER, LECLERC-DAVID AND WARNER 113.
- Muscle gene**  
mesoderm induction in *Xenopus*: GURDON, KAO, KATO AND HOPWOOD 137.
- Mutation**  
cell fate in the zebrafish: HO 65.
- Neural cell adhesion molecule (NCAM)**  
regulation of cell interactions: RUTISHAUSER 99.
- Neural crest**  
gastrulation and the evolution of development: WOLPERT 7.
- Neural induction**  
chick and frog mesoderm induction and axis formation: STERN, HATADA, SELLECK AND STOREY 151.  
planar signals in neural patterning: DONIACH 183.  
retinoic acid and the late phase of neural induction: SHARPE 203.
- Oligos**  
cytokeratin in *Xenopus* gastrulation: HEASMAN, TORPEY AND WYLIE 119.
- Oocyte**  
cytokeratin in *Xenopus* gastrulation: HEASMAN, TORPEY AND WYLIE 119.
- Oogenesis**  
cytokeratin in *Xenopus* gastrulation: HEASMAN, TORPEY AND WYLIE 119.
- Ooplasmic separation**  
a gastrulation center in the ascidian egg: JEFFERY 53.
- Organizer**  
role of *gooseoid* in gastrulation: DE ROBERTIS, BLUM, NIEHRS AND STEINBEISSER 167.
- Organogenesis**  
*Brachyury* effect on mouse gastrulation and organogenesis: BEDDINGTON, RASHBASS AND WILSON 157.
- Pattern formation**  
chick and frog mesoderm induction and axis formation: STERN, HATADA, SELLECK AND STOREY 151.  
gastrulation and the evolution of development: WOLPERT 7.  
in sea urchin gastrulation: MCCLAY, ARMSTRONG AND HARDIN 33.
- Planar induction**  
planar signals in neural patterning: DONIACH 183.
- Polarization**  
a gastrulation center in the ascidian egg: JEFFERY 53.
- Polysialic acid**  
regulation of cell interactions: RUTISHAUSER 99.
- Preimplantation embryo**  
gap junctions in the mouse embryo: BECKER, LECLERC-DAVID AND WARNER 113.  
mouse early embryo differentiation: FLEMING, JAVED AND HAY 105.
- Primary mesenchyme cell(PMC)**  
cell interactions in the sea urchin embryo: ETTENSOHN 43.
- Protein synthesis**  
a gastrulation center in the ascidian egg: JEFFERY 53.  
mesoderm induction in *Xenopus*: GURDON, KAO, KATO AND HOPWOOD 137.
- Protozoa**  
gastrulation and the evolution of development: WOLPERT 7.
- Regulation**  
of cell interactions: RUTISHAUSER 99.
- Regulator**  
regulation of cell interactions: RUTISHAUSER 99.
- Retinoic acid**  
and the late phase of neural induction: SHARPE 203.  
induction of *Hox-2* genes by retinoic acid: DEKKER, PANNESE, HOUTZAGER, TIMMERMANS, BONCINELLI AND DURSTON 195.
- mRNA**  
cytokeratin in *Xenopus* gastrulation: HEASMAN, TORPEY AND WYLIE 119.
- RNA isolation**  
induction of *Hox-2* genes by retinoic acid: DEKKER, PANNESE, HOUTZAGER, TIMMERMANS, BONCINELLI AND DURSTON 195.
- Sea urchin**  
cell interactions in the sea urchin embryo: ETTENSOHN 43.  
evolution of developmental decisions and morphogenesis: RAFF 15.  
gastrulation and the evolution of development: WOLPERT 7.  
pattern formation in sea urchin gastrulation: MCCLAY, ARMSTRONG AND HARDIN 33.
- Secondary mesenchyme cell(SMC)**  
cell interactions in the sea urchin embryo: ETTENSOHN 43.
- Selection**  
evolution of developmental decisions and morphogenesis: RAFF 15.  
gastrulation and the evolution of development: WOLPERT 7.
- Signaling competence**  
cell interactions in the sea urchin embryo: ETTENSOHN 43.
- Skeletogenesis**  
pattern formation in sea urchin gastrulation: MCCLAY, ARMSTRONG AND HARDIN 33.
- snail**  
early *Drosophila* mesoderm formation: LEPTIN, CASAL, GRUNEWALD AND REUTER 23.
- spadetail**  
cell fate in the zebrafish: HO 65.
- Spatial colinearity**  
induction of *Hox-2* genes by retinoic acid: DEKKER, PANNESE, HOUTZAGER, TIMMERMANS, BONCINELLI AND DURSTON 195.
- Spatial information**  
pattern formation in sea urchin gastrulation: MCCLAY, ARMSTRONG AND HARDIN 33.
- Spemann's organiser**  
role of *gooseoid* in gastrulation: DE ROBERTIS, BLUM, NIEHRS AND STEINBEISSER 167.
- Spiculogenesis**  
cell interactions in the sea urchin embryo: ETTENSOHN 43.
- Stem cell**  
chick and frog mesoderm induction and axis formation: STERN, HATADA, SELLECK AND STOREY 151.
- T/T cell**  
*Brachyury* effect on mouse gastrulation and organogenesis: BEDDINGTON, RASHBASS AND WILSON 157.
- Temporal colinearity**  
induction of *Hox-2* genes by retinoic acid: DEKKER, PANNESE, HOUTZAGER, TIMMERMANS, BONCINELLI AND DURSTON 195.
- Tight junctions**  
mouse early embryo differentiation: FLEMING, JAVED AND HAY 105.
- Time-lapse videography**  
fate map with time-lapse videography: BORTIER AND VAKAET 93.

**Transcriptional regulation**

control of *Drosophila* dorsoventral development: THISSE AND THISSE 173.

**Trophectoderm**

mouse early embryo differentiation: FLEMING, JAVED AND HAY 105.

**twist**

control of *Drosophila* dorsoventral development: THISSE AND THISSE 173.

early *Drosophila* mesoderm formation: LEPTIN, CASAL, GRUNEWALD AND REUTER 23.

**UV irradiation**

a gastrulation center in the ascidian egg: JEFFERY 53.

**Ventral furrow formation**

early *Drosophila* mesoderm formation: LEPTIN, CASAL, GRUNEWALD AND REUTER 23.

**Vertical induction**

planar signals in neural patterning: DONIACH 183.

**Wnt**

mesoderm induction and gastrulation: SMITH AND HOWARD 127.

**Xenografts**

fate map with time-lapse videography: BORTIER AND VAKAET 93.

**Xenopus**

convergence and extension: KELLER, SHIH AND DOMINGO 81.

cytokeratin in gastrulation: HEASMAN, TORPEY AND WYLIE 119.

dorsoventral and anteroposterior patterning of mesoderm: SLACK, ISAACS, JOHNSON, LETTICE, TANNAHILL AND THOMPSON 143.

induction of *Hox-2* genes by retinoic acid: DEKKER, PANNESE, HOUTZAGER, TIMMERMANS, BONCINELLI AND DURSTON 195.

mesoderm induction: GURDON, KAO, KATO AND HOPWOOD 137.

mesoderm induction and gastrulation: SMITH AND HOWARD 127.

planar signals in neural patterning: DONIACH 183.

retinoic acid and the late phase of neural induction: SHARPE 203.

role of *gooseoid* in gastrulation: DE ROBERTIS, BLUM, NIEHRS AND STEINBEISSER 167.

**XlHbox1**

planar signals in neural patterning: DONIACH 183.

**XlHbox6**

planar signals in neural patterning: DONIACH 183.

retinoic acid and the late phase of neural induction: SHARPE 203.

**Yolk syncytial layer**

gastrulation in *Fundulus*: TRINKHAUS 75.

**YSL transition**

gastrulation in *Fundulus*: TRINKHAUS 75.

**Zebrafish**

cell fate in the zebrafish: HO 65.

**ZO-1**

mouse early embryo differentiation: FLEMING, JAVED AND HAY 105.

**Zygotic gene**

control of *Drosophila* dorsoventral development: THISSE AND THISSE 173.

